Appendix A.
Public Outreach Summary

Table A.1. Ranking of oral comments provided at the first public input meeting, August 6, 2003, Napa Public Library

	Comment	"Votes"
1.	Guarantee hunting into the future	56
2.	Prohibit motor vehicles [allow foot and horseback only (36), allow foot, horseback, and bicycles (1)]	37
3.	Prohibit grazing (21) or use grazing only as a tool for wildlife habitat management or for restoring native plants (6)	27
4.	Develop and maintain hiking/equestrian trails as part of a regional trail system on public lands (several specific proposals made)	21
5.	Allow limited-duration back-country camping	14
6.	Consider state wilderness designation	13
7.	Control invasive weeds and restore native grasses, oaks, and other plants (possibly through the use of prescribed fire)	12
8.	Establish an access at the southeast end of the BLM Cedar Roughs Wilderness Study Area via land acquisition or trail easement	10
9.	Improve boundary signage to prevent trespass into private property	9
9.	Improve signage and provide interpretive displays and brochures (4), including some promoting fire-prevention awareness (5)	9
10.	Build and maintain ponds and water sources for wildlife	8
10.	Prohibit shooting except for hunting (i.e., no target shooting or plinking)	8
11.	Consider a portion of the areas for junior or limited-opportunity hunts (e.g., junior turkey hunts)	5
11.	Prohibit commercial activity	5
11.	Prohibit hunting	5
11.	Schedule non-overlapping periods for hunting and non-hunting activities	5
12.	Adopt a regional management perspective (e.g., consider that recreational opportunities already existing on nearby public lands [e.g., target shooting] need not be also provided by DFG, or that some activities [hiking and backpacking] may require consistent regulations across management units)	4
13.	Allow target shooting in designated areas	3
14.	Provide a roadside emergency phone or cell phone service	2
14.	Establish a monitoring program for human impacts	2
14.	Restrict bicycles to motor vehicle routes	2
15.	Develop a policy for as yet unknown demands for future use	1
15.	Coordinate law enforcement with other agencies (share staff)	1
15.	Ensure management plan protects the rights of private landowners	1
15.	If additional roads are provided, restrict access to street-legal vehicles	1

Table A.2. Ranking of oral comments provided at the second public input meeting, October 30, 2003, Woodland Public Library.

	Comment	"Votes"
1.	Consider the impact of wildlife area management on surrounding private lands	18
2.	Guarantee hunting into the future	9
3.	Prohibit vehicle access	6
4.	Develop a fire prevention/response plan (especially addressing campfires and protection of natural values)	4
4.	Integrate these wildlife areas into a regional trail system	4
5.	Prohibit livestock grazing	3
6.	Consider a fire-response access across Pope Creek.	2
6.	Keep invasive plants out and keep working to eradicate existing invasive plants (especially yellow starthistle) and promote native bunch grasses	2
6.	Place low emphasis on prescribed burns and high emphasis on elk for vegetation management	2
6.	Do not allow reseeding (especially with exotic species) after fire	2
6.	Provide interpretive signage with an emphasis on "leave no trace" ethics and also providing general information on the area	2
6.	Prohibit hunting	2
6.	Encourage low-impact, non-wildlife damaging public uses (e.g., wildlife viewing)	2
7.	Route trails away from sensitive plant and wildlife areas	1
7.	Allow only non-mechanized access and management techniques	1
7.	Use fire as a weed management tool	1
7.	Ensure that Cedar Roughs remains open to the public (i.e., do not designate as a limited-access ecological reserve)	1

Table A.3. Ranking of written input received at or following both public input meetings.

	Comment*	Times mentioned
1.	Allow for access by foot and horseback only (3), for foot, horseback, and bicycles (bikes at least in areas where won't be detrimental to land) (4), and for trails that can accommodate deer-carts and bikes (1)	8
2.	Prohibit motor vehicles	6
3.	Manage for multiple uses (4) with zoning if necessary (1)	5
3.	Improve signage in general (1), to prevent trespass into neighboring properties (1), and to provide interpretive displays on fire-prevention awareness (1) and natural history (2)	5
4.	Develop trails in general (3), or as part of a regional trail system on public lands (some specific proposals were made) (1)	4
4.	Keep land as natural as possible (3) and manage to enhance or restore values of the habitat/resources (1)	4
5.	Consider state wilderness designation	3
5.	Guarantee hunting into the future (2) especially for turkeys (1)	3
5.	Provide designating parking areas (3)	3
5.	Allow camping (2) but keeping sites 4-6 miles apart (1)	3
5.	Provide adequate enforcement of regulations	3
5.	Prohibit hunting	3
5.	If roads are provided, keep them well maintained (2) and ensure that they have minimal environmental impact (1)	3
6.	Provide for limited motor vehicle access away from the main road for seniors and handicapped	2
6.	No roads	2
6.	Protect the area from fire by constructing firebreaks (1) and banning summer/fall fires (1)	2
6.	If grazing is allowed, use it as a tool for restoring native plants (1) or for fire management (1)	2
7.	Toilets are needed in all designated parking and hiking areas	1
7.	Consider a land swap: KWA gets some land from adjacent BLM and DFG's Cedar Roughs parcel goes to BLM, thus allowing BLM to provide access trails as was planned in early 1990's.	1
7.	Build /maintain ponds and water sources for wildlife and people	1
7.	Reduce any logging to a minimum	1
	Limit vehicle access	1
7.	No shooting	1
7.	No bridge across Pope creek into DFG parcels	1
7.	No Camping; day-use only	1
7.	If hunting is allowed, restrict it to limited permits, with no-hunting zones within property	1

Appendix B.
Methods and Results for Biological Surveys

❖ Surveys for Non-native Invasive Species

Invasive plant surveys concentrated on two vegetation types, grasslands and riparian areas, and targeted non-native species that have been recognized as transformers (i.e., those with (1) abundances that become disproportionately high compared to native species, that (2) transform natural processes and cycles, such as fire frequency, hydrology, decomposition, and that (3) greatly reduce or eliminate native species) and for which some measure of control is feasible. Different methods of surveying and recording were used for each vegetation type.

Grassland Survey Methods

Survey units were defined by the polygons classified as California Annual Grassland or Serpentine Grassland on the Napa County MCV Vegetation Map.

Each grassland polygon was visited by a surveyor (Paul Aigner, Cathy Koehler, Tina Fabula) who estimated the percent cover of all target species (Table B.1). All grassland polygons within the CRWA were visited. Percent cover was estimated using eight categories (absent, <1%, 1-5%, >5-25%, >25-50%, >50-75%, >75-95%, and >95%). In polygons where target species were not homogenously distributed, the surveyor subdivided polygons into smaller more homogenous units, by drawing on paper maps in the field. These subdivided polygons and percent cover estimates were later entered into ArcMap. Surveys were conducted on 25 November 2003 and 22 April 2004.

Table B.1: Target species for grassland surveys.

Common name	Scientific name	Map
Non-native species		
Black mustard	*Brassica nigra*	Not found
Bull thistle	*Cirsium vulgare*	Not found
Goat grass	*Aegilops triuncialis*	B.1
Harding grass	*Phalaris aquatica*	Not found
Italian thistle	*Carduus pycnocephalus*	Not found
Medusa head	*Taeniatherum caput-medusae*	B.2
Perennial pepperweed	*Lepidium latifolium*	Not found
Teasel	*Dipsacus sylvestris*	B.3
Yellow starthistle	*Centaurea solstitialis*	B.4
Native species		
Needle grass	*Nasella spp.*	B.5

Cover of many non-native annual grasses (in particular oat grass (*Avena fatua* and *Avena barbata*), soft chess (*Bromus hordeaceus*), rip-gut brome (*Bromus diandrus*), medusa head (*Taeniatherum caput-medusae*) and wild rye (*Lolium multiflorum*)) was not estimated because these species are ubiquitous throughout California. In addition to target weeds, surveyors also estimated cover of the native bunchgrass (*Nasella* spp.).

Riparian Survey Methods

The Pope Creek and Maxwell Creek riparian corridors were surveyed by walking along or near the stream channel. Target species for these surveys included arundo (*Arundo donax*), tamarisk (*Tamarix* spp.), tree-of-heaven (*Ailanthus altissima*), teasel (*Dipsacus sylvestris*), and perennial pepperweed (*Lepidium latifolium*). Arundo and perennial pepperweed were not found; distributions of the remaining species are found in figures B.6 (tamarisk) and B.3 (tree-of-heaven and teasel).

Results of Surveys for Non-native Invasive Species

Survey results are presented in Figures B.1 – B.6.

Figure B.1. Distribution of barbed goatgrass (*Aegilops triuncialis*) at the Cedar Roughs Wildlife Area (2003-2004).

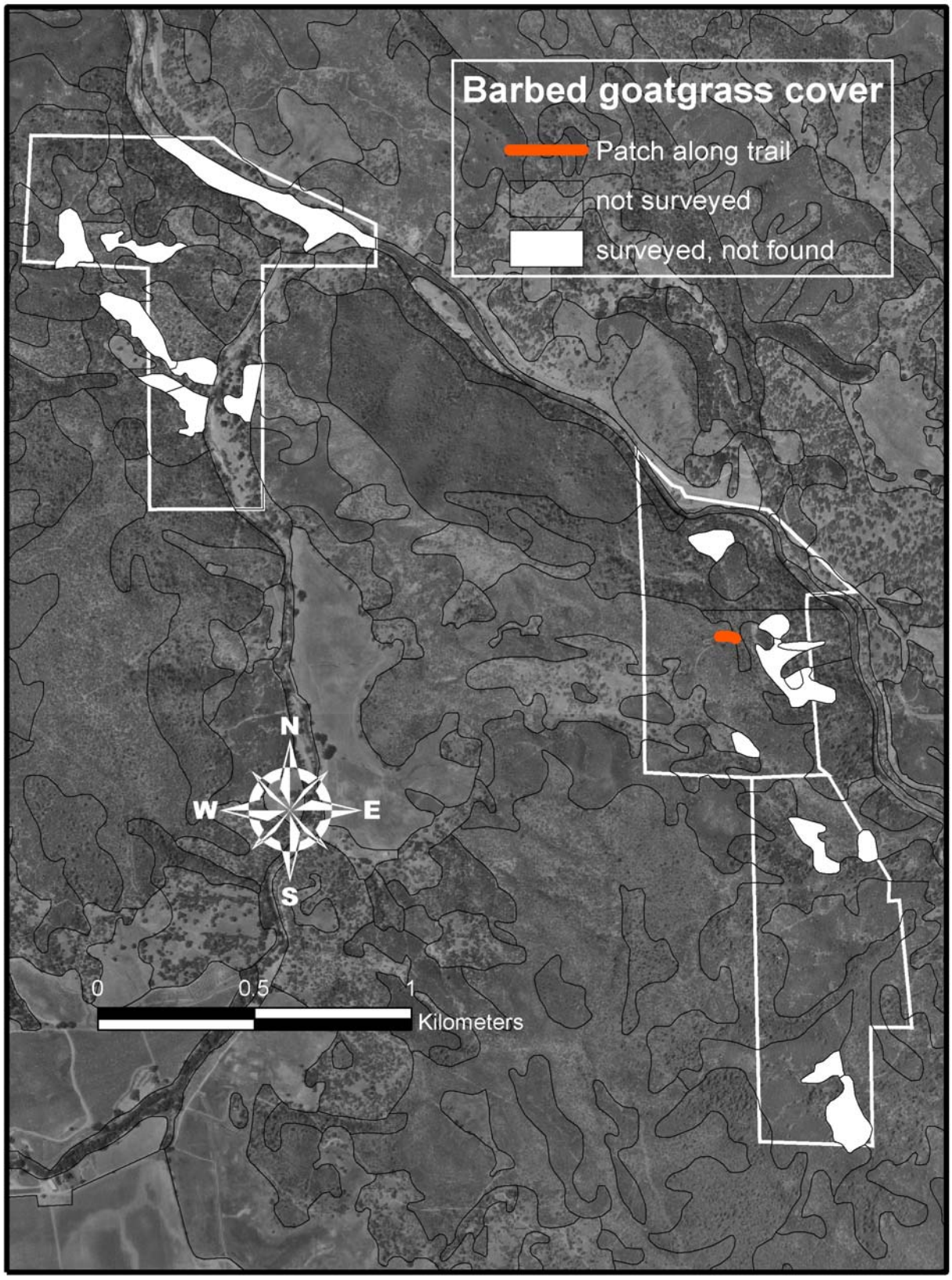


Figure B.2. Distribution of medusahead (*Taeniatherum caput-medusae*) at the Cedar Roughs Wildlife Area (2003-2004).

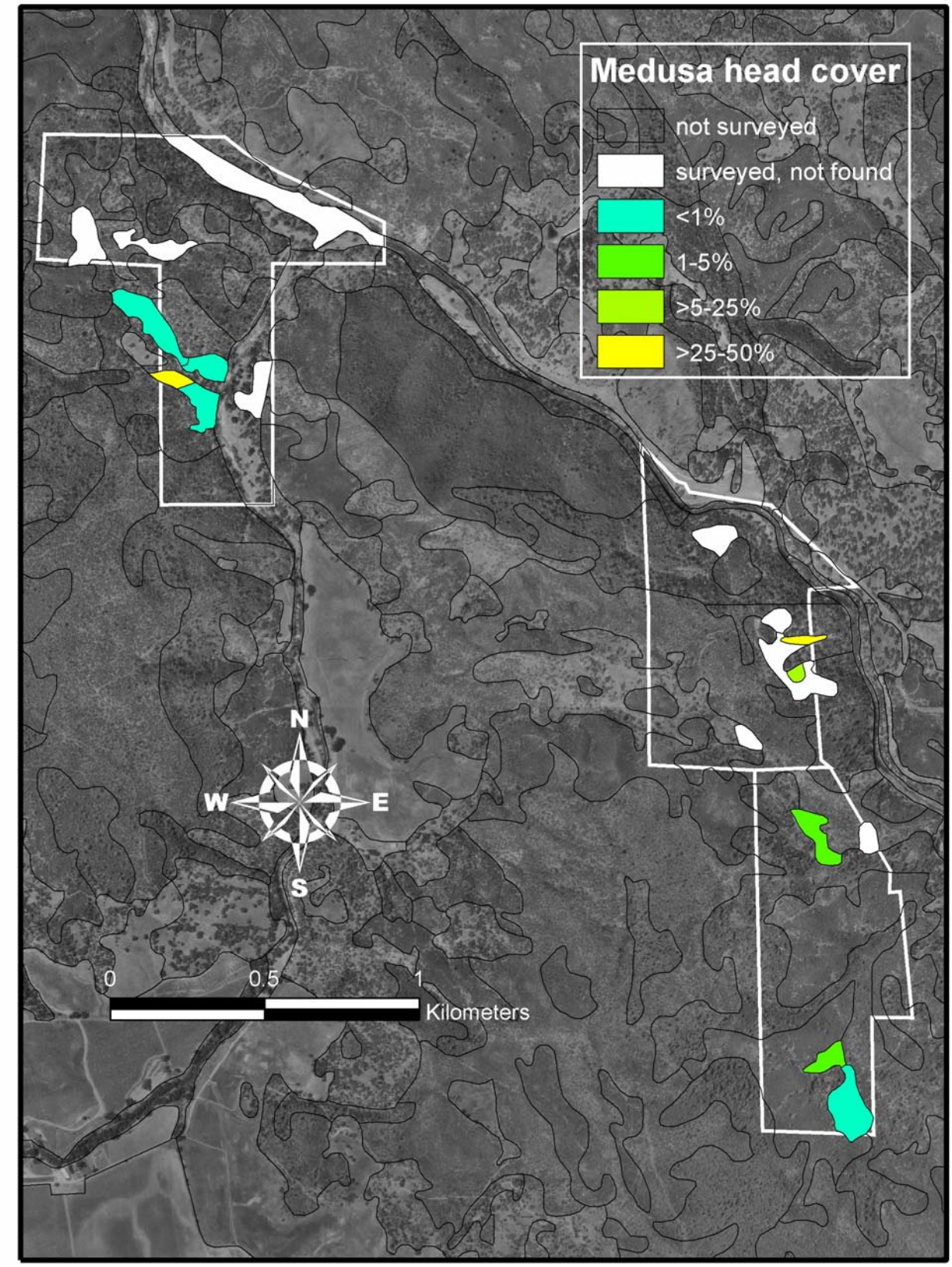


Figure B.3. Distribution of teasel (*Dipsacus sylvestris*) and tree-of-heaven (*Ailanthus altissima*) at the Cedar Roughs Wildlife Area (2003-2004).

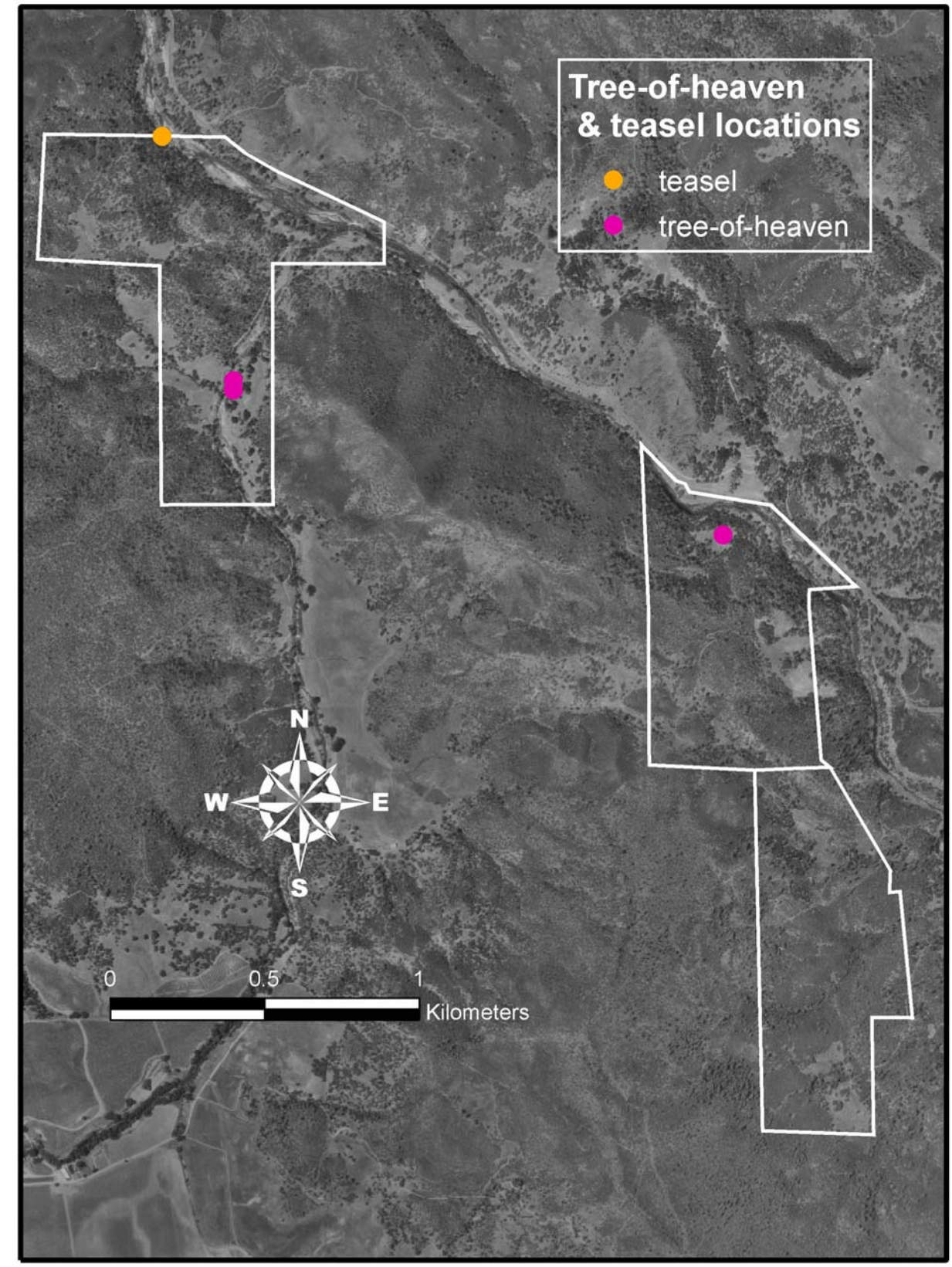


Figure B.4. Distribution of yellow starthistle (*Centaurea solstitialis*) at the Cedar Roughs Wildlife Area (2003-2004).

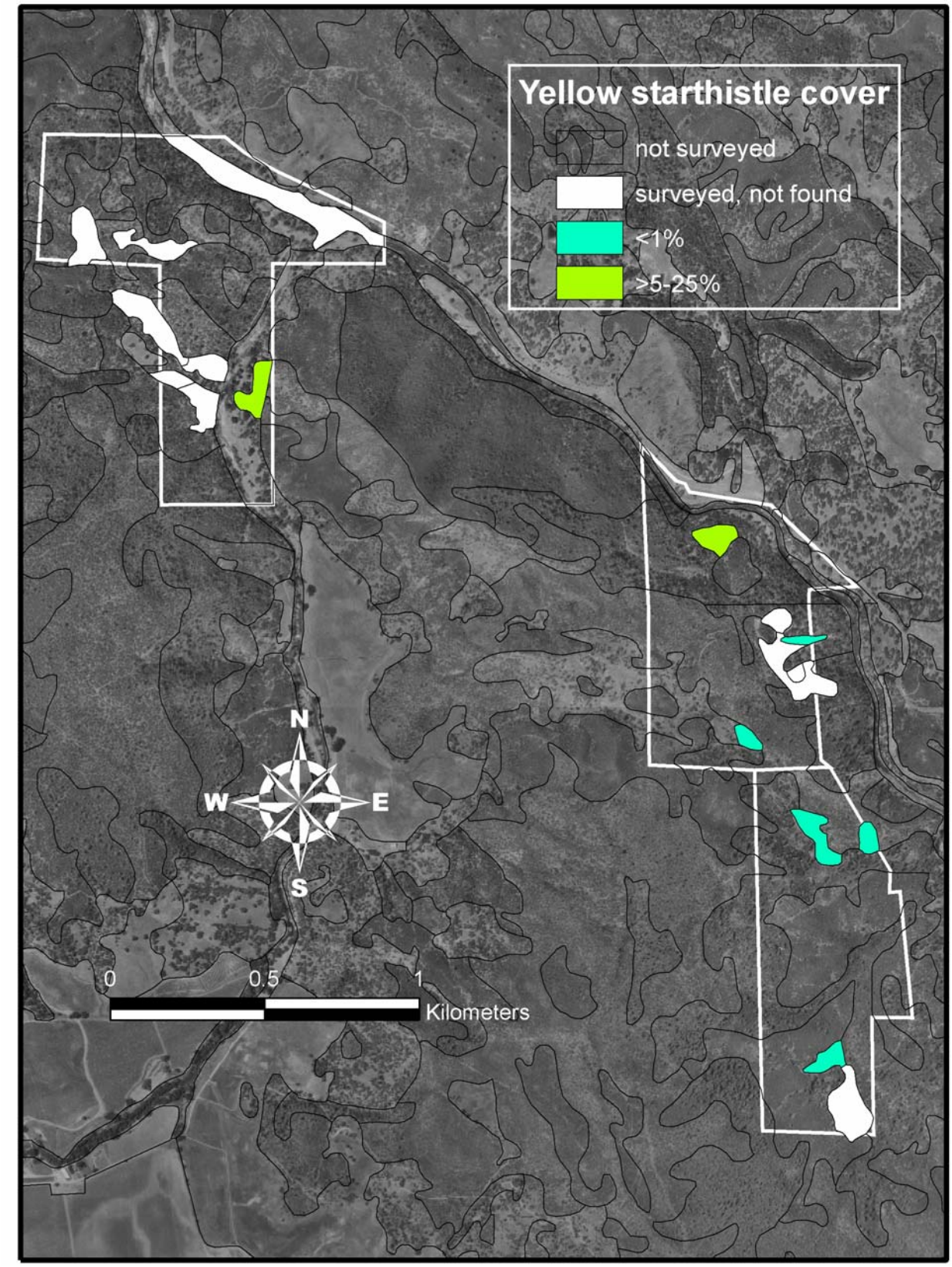


Figure B.5. Distribution of needle grass (*Nasella* spp.) at the Cedar Roughs Wildlife Area (2003-2004).

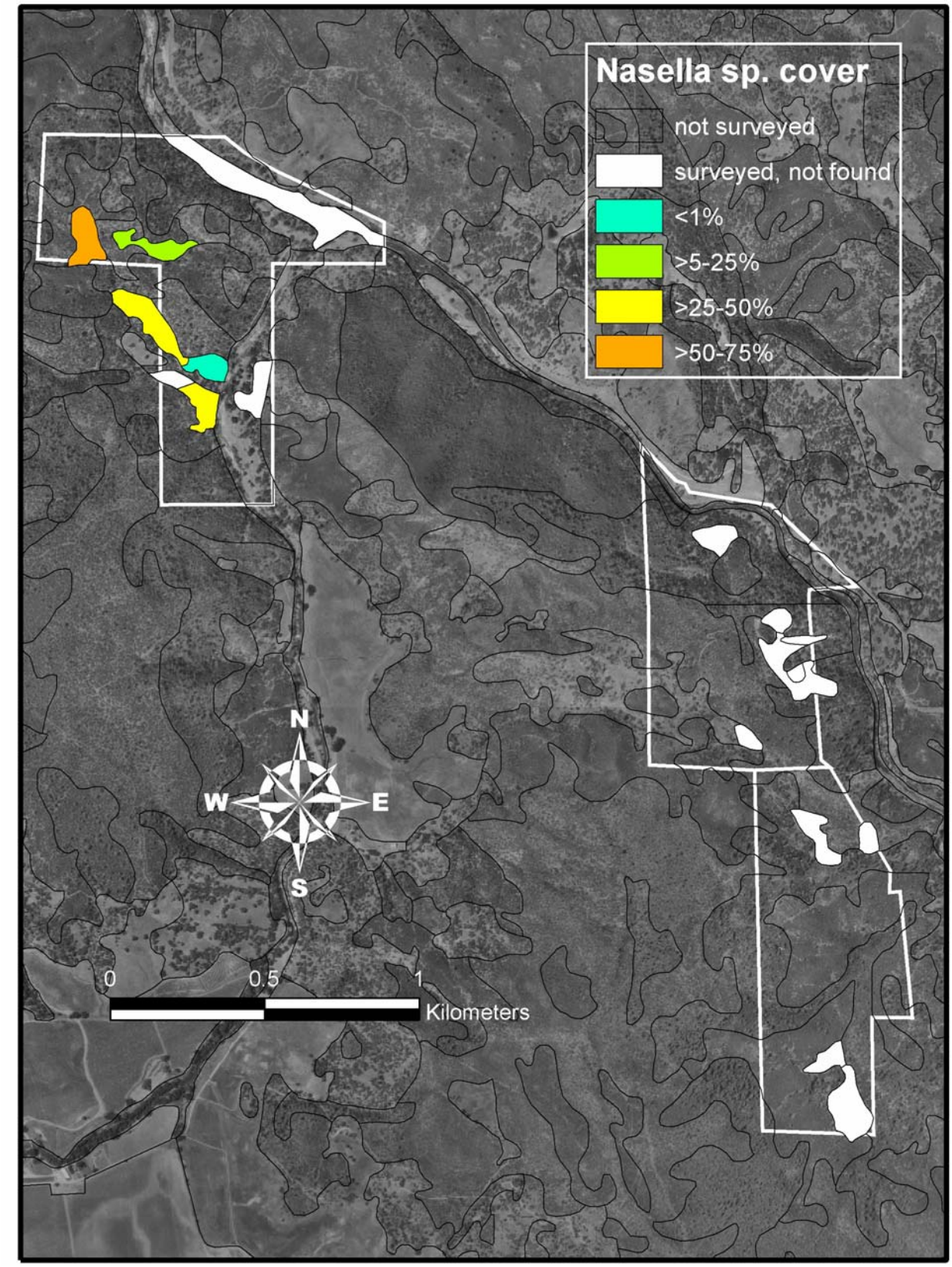
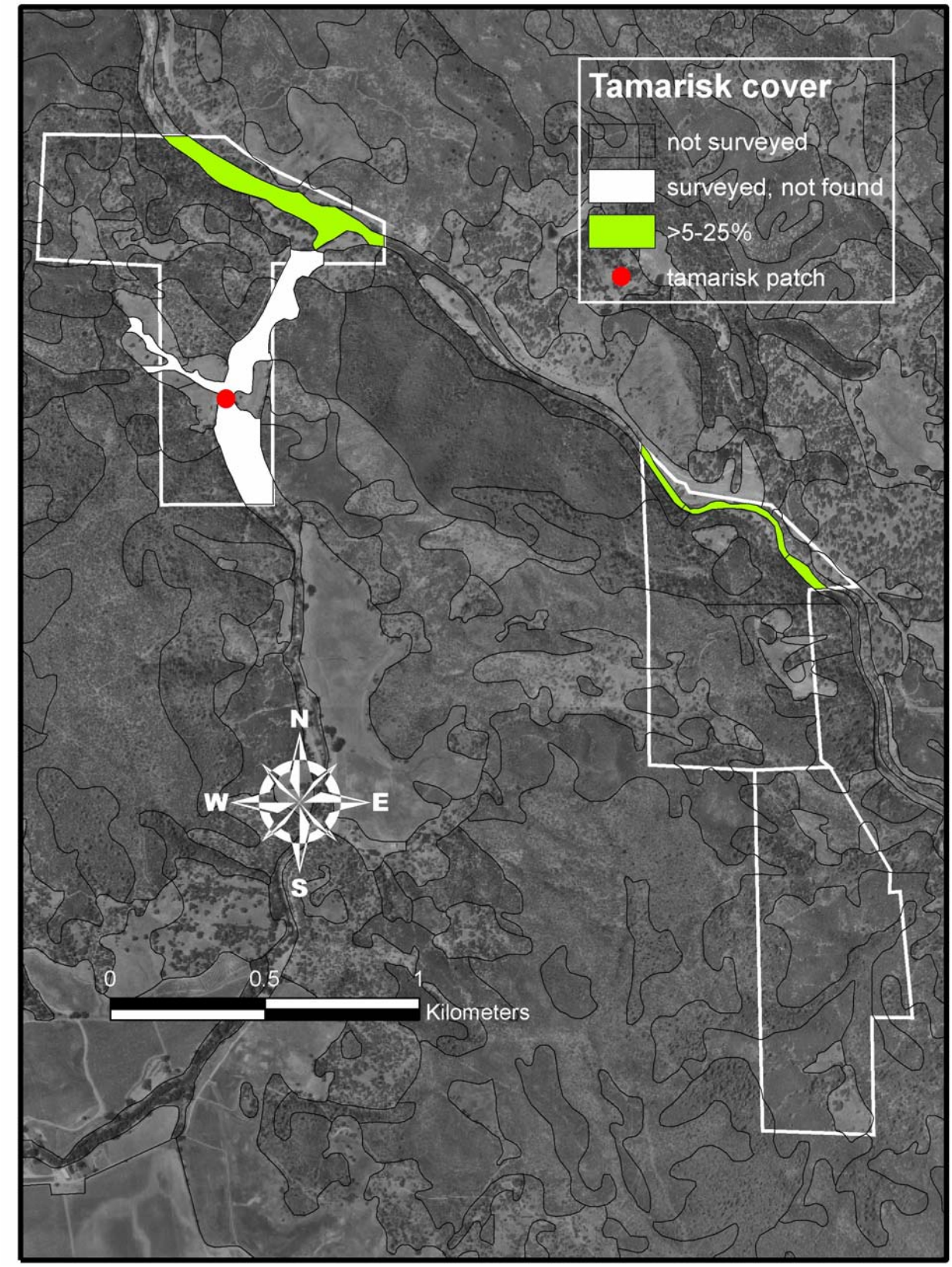


Figure B.6. Cover of perennial tamarisk (*Tamarix* sp.) at the Cedar Roughs Wildlife Area (2003-2004).



❖ **Surveys for Special Status Plants**

Surveys for special status plants were conducted by Jake Rugyt . Surveys focused on collecting distributional data on all California Native Plant Society special status species from those that are considered Rare & Endangered to those of limited distribution (List 4). Species that are locally rare within Napa County were also noted. There are no known state or federally listed plants within the CRWA or surrounding area. Sixteen and a half hours were spent at the two Cedar Roughs units.

A list of species found is given in Chapter 3 of the Plan.

Appendix C.
USDA Soil Conservation Service Map

Soil map of the Cedar Roughs Wildlife Area, adapted from the Soil Survey of Napa County, by G. Lambert and J. Kashiwagi, USDA Soil Conservation Service, 1978. Map units are keyed to the table below. For series descriptions, see the text of the Knoxville Wildlife Area Management Plan and http://www.ca.nrcs.usda.gov/mlra02/napa.html.

Table C.1. Key to soils mapped at the Cedar Roughs Wildlife Area

Bressa series	
114	Bressa-Dibble complex, 30 to 50 percent slopes
Henneke series	
154	Henneke gravelly loam, 30 to 75 percent slopes
Maxwell series	
161	Maxwell clay, 2 to 9 percent slopes
Montara series	
166	Montara clay loam, 5 to 30 percent slopes
Other	
174	Riverwash

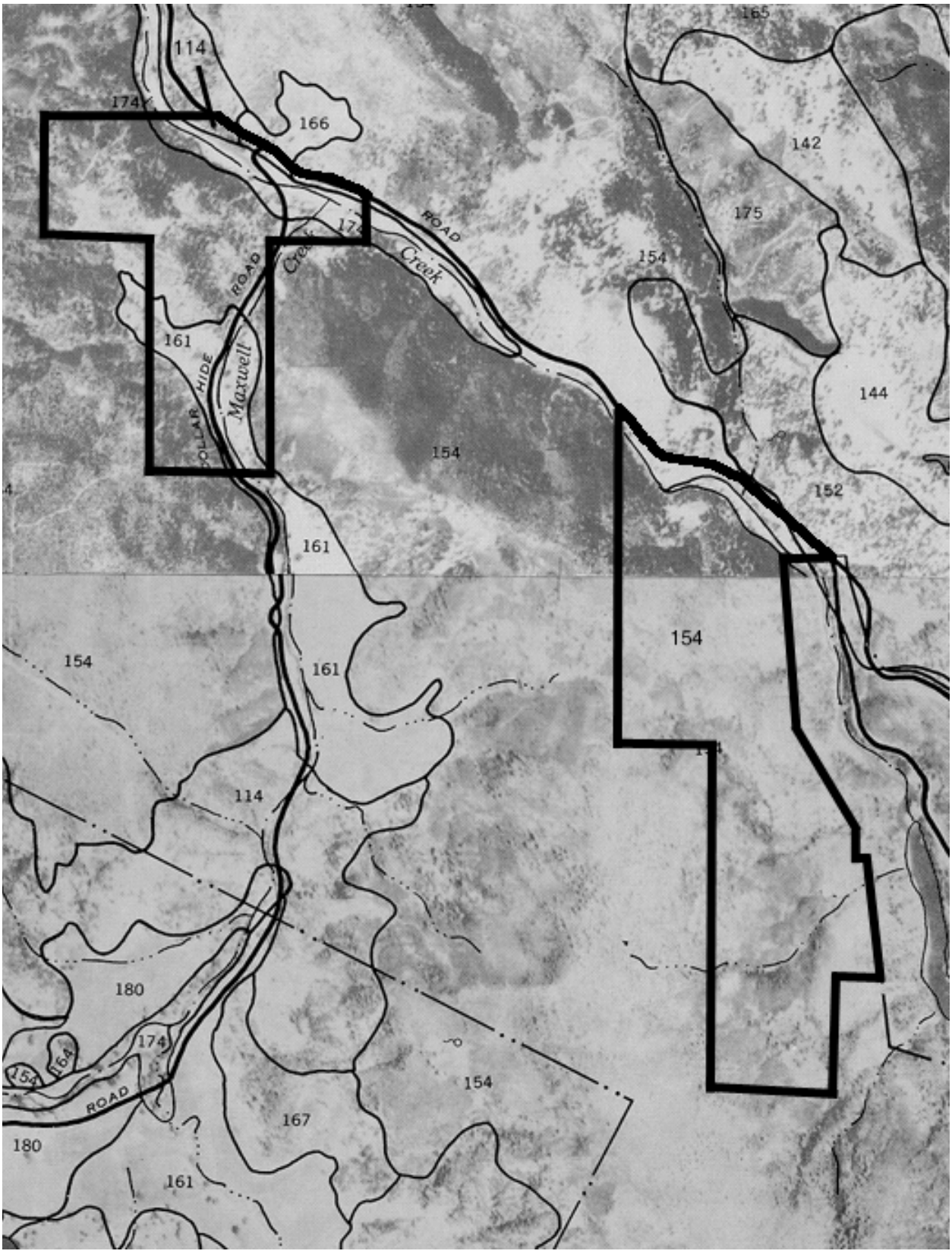

114
174
166
142
175
154
ROAD
Creek
ROAD
161
Maxwell
HIDE
COLLAR
144
154
152
161
154
154
161
114
180
174
164
154
ROAD
154
167
180
161

Table A.3. (continued)

	Comment*	Times mentioned
7.	Fence in all protected areas	1
7.	Prevent erosion by preventing fire and overgrazing	1

* *- Some comments are grouped into similar topics.*

Appendix D.
Vascular Plants of the Cedar Roughs Wildlife Area

Vascular plants of the Cedar Roughs Wildlife Area.

Compiled by Jake Ruygt. Additional editing by Gene Cooley (DFG) and Tina Fabula (DFG).
Asterisks (*) indicate non-native species. Question marks (?) indicate species or subspecies not keyed or not positively identified.

Scientific Name	common name	CA status
Ferns and Allies		
Adiantum jordanii	California maidenhair fern	
Aspidotis densa	Indian's dream	
Dryopteris arguta	California wood fern	
Equisetum laevigatum	Braun's scouring rush	
Equisetum telmateia ssp. *braunii*	giant horsetail	
Pellaea andromedaefolia	coffee fern	
Pellaea mucronata	bird's foot fern	
Pentagramma triangularis ssp. *triangularis*	goldback fern	
Polypodium calirhiza	acrid fern	
Conifers		
Cupressus sargentii	Sargent's cypress	
Pinus sabiniana	foothill pine, gray pine	
Flowering Plants – Dicots		
ANACARDIACEAE		
Rhus trilobata	squaw bush	
Toxicodendron diversilobum	poison oak	
APIACEAE		
Angelica tomentosa	coast range angelica	
*Conium maculatum**	poison hemlock	
Daucus pusillus	rattlesnake weed	
Lomatium californicum	California lomatium	
Lomatium dasycarpum ssp. *dasycarpum*	woolly-fruited lomatium	
Lomatium marginatum var. *purpureum*	Hartweg's lomatium	
Lomatium utriculatum	foothill lomatium	
Perideridia kelloggii	Kellogg's yampah	
Sanicula bipinnata	poison sanicle	
Sanicula bipinnatifida	purple sanicle	
Sanicula crassicaulis	Pacific snakeroot	
Sanicula tuberosa	tuberous sanicle	
Torilis spp.*	hedge-parsley	
ARISTOLOCHIACEAE		
Aristolochia californica	Dutchman’s pipe	

Vascular plants of the Cedar Roughs Wildlife Area.

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ASCLEPIADACEAE		
Asclepias eriocarpa	kotolo	
Asclepias fascicularis	narrow-leaved milkweed	
ASTERACEAE		
Achillea millefolium	common yarrow	
Achyrachaena mollis	blow wives	
Agoseris grandiflora	large-flowered agoseris	
Agoseris heterophylla	ann. mountain dandelion	
Ancistrocarpus filagineus	wolly fish-hooks	
Artemisia douglasiana	Douglas' mugwort	
Aster radulinus	rough aster	
Baccharis pilularis	coyote brush	
Brickellia californica	California brickellia	
*Carduus pycnocephalus**	Italian thistle	
*Centaurea calcitrapa**	purple star-thistle	invasive-B
*Centaurea solstitialis**	yellow star-thistle	invasive-A1
Chaenactis glabriuscula var. *heterocarpa*	slender chaenactis	
Cirsium cymosum	peregrine thistle	
Erigeron philadelphicus	Philadelphia fleabane	
Eriophyllum lanatum var. *achillaeoides*	woolly sunflower	
Euthamia occidentalis	western goldenrod	
Gnaphalium californicum	California cudweed	
Grindelia hirsutula var. ?	hairy gumweed	
Helianthus exilis	serpentine sunflower	CNPS 1B
Hemizonia congesta ssp. *luzulifolia*	hayfield tarweed	
Hesperevax sparsiflora var. *sparsiflora*	erect hesperevax	
Heterotheca oregana var. *rudis*	red Oregon goldenaster	
Hieracium albiflorum	white-flowered hawkweed	
Lagophylla minor	lesser hareleaf	
Lasthenia californica	California goldfields	
Lessingia ramulosa	Sonoma lessingia	
Madia exigua	small tarweed	
Madia gracilis	slender tarweed	
Malacothrix floccifera	woolly malacothrix	
Micropus californicus var. *californicus*	slender cottonweed	
Microseris douglasii ssp. *douglasii*	Douglas' microseris	
Rigiopappus leptocladus	rigiopappus	
Senecio aronicoides	California butterweed	
*Senecio vulgaris**	common grounsel	
*Silybum marianum**	milk thistle	
Solidago californica	California goldenrod	
Stephanomeria virgata ssp. *pleurocarpa*	tall staphanomeria	

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*Taraxacum officinale**	dandelion	
Uropappus lindleyi	silver puffs	
Wyethia helenoides	gray mule-ears	
Xanthium strumarium	cocklebur	
BETULACEAE		
Alnus rhombifolia	white alder	
BORAGINACEAE		
Amsinckia menziesii var. *intermedia*	fiddleneck	
Cryptantha hispidula	Napa cryptantha	
Cynoglossum grande	grand hound's tongue	
Pectocarya pusilla	dwarf pectocarya	
Plagiobothrys bracteatus	bracted popcornflower	
Plagiobothrys nothofulvus	rusty popcornflower	
BRASSICACEAE		
Athysanus pusillus	dwarf athysanus	
Cardamine californica var. *sinuata*	California milkmaids	
Guillenia lasiophylla	California mustard	
*Hirshfeldia incana**	Mediterranean mustard	
*Lepidium latifolium**	large-leaved peppergrass	invasive-A1
Streptanthus breweri ssp. *breweri*	Brewer's jewelflower	
Streptanthus glandulosus ssp. *glandulosus*	common jewelflower	
Thysanocarpus curvipes	lace pod	
CAMPANULACEAE		
Githopsis specularioides	Venus' looking glass	
Heterocodon rariflorum	heterocodon	
Triodanis biflora	Venus looking glass	
CAPRIFOLIACEAE		
Lonicera interrupta	chaparral honeysuckle	
Sambucus mexicana	blue elderberry	
Symphoricarpos albus var. *laevigatus*	common snowberry	
CARYOPHYLLACEAE		
*Cerastium glomeratum**	sticky mouse-eared chickweed	
Minuartia douglasii	Douglas' sandwort	
*Petroragia prolifera**	wild carnation	
Stellaria nitens	shiny chickweed	

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CHENOPODIACEAE		
Chenopodium californicum	California goosefoot	
CONVOLVULACEAE		
Calystegia collina ssp. *collina*	serpentine morning-glory	
Calystegia occidentalis ssp. *occidentalis*	western morning-glory	
Calystegia occidentalis ssp. ?		
Calystegia subacaulis ?	hill morning-glory	
*Convolvulus arvensis**	field bindweed	
CRASSULACEAE		
Dudleya cymosa ssp. *cymosa*	Dudley's live-forever	
CUCURBITACEAE		
Marah fabaceus	California manroot	
CUSCUTACEAE		
Cuscuta spp.	dodder	
DATISCACEAE		
Datisca glomerata	durango root	
DIPSACACEAE		
*Dipsacus sativus**	fuller's teasel	
ERICACEAE		
Arbutus menziesii	Pacific madrone	
Arctostaphylos manzanita ssp. *manzanita*	common manzanita	
Arctostaphylos viscida ssp. *pulchella*	white-leaf manzanita	
EUPHORBIACEAE		
Euphorbia crenulata	Chinese caps	
Euphorbia spathulata	reticulate-seeded spurge	
FABACEAE		
Astragalus breweri	Brewer's Milkvetch	CNPS 4
Astragalus clevelandii	Cleveland's milkvetch	CNPS 4
Astragalus gambelianus	Gambel's dwarf locoweed	
Cercis occidentalis	western redbud	
Hoita macrostachya	leather root	
Lathyrus jepsonii ssp. *californicus*	California pea	
Lathyrus vestitus var. *vestitus*	hillside pea	
Lotus scoparius	deerweed	

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Lotus purshianus		
Lotus wrangelianus	Chilean trefoil	
Lupinus bicolor	miniature lupine	
Lupinus microcarpus var. *microcarpus*	chick lupine	
Lupinus nanus	Douglas's lupine	
Lupinus succulentus	arroyo lupine	
*Melilotus albus**	white sweet clover	
Rupertia physodes	common rupertia	
Thermopsis macrophylla	false lupine	
Trifolium albopurpureum var. *dichotomum*	branched Indian clover	
Trifolium albopurpureum var. *olivaceum*	olive clover	
Trifolium bifidum var.?	notch-leaf clover	
*Trifolium dubium**	shamrock clover	
Trifolium microcephalum	maiden clover	
*Trifolium subteraneum**	sub clover	
Trifolium willdenovii	tomcat clover	
Vicia americana var. *americana*	American vetch	
Vicia sativa var. *nigra**	common vetch	
Vicia villosa ssp. *varia**	woolly-podded vetch	
FAGACEAE		
Quercus agrifolia ssp. *agrifolia*	coast live oak	
Quercus berberidifolia	scrub oak	
Quercus durata	leather oak	
Quercus lobata	valley oak	
Quercus wislizenii	interior live oak	
Quercus X *morehus*	oracle oak	
GARRYACEAE		
Garrya congdonii	Congdon's silk tassel	
GENTIANACEAE		
Centaurium muehlenbergii	muehly	
GERANIACEAE		
*Erodium cicutarium**	redstem filaree	
*Geranium dissectum**	cut-leaf geranium	
*Geranium molle**	dove's foot geranium	
GROSSULARIACEAE		
Ribes malvaceum	chaparral currant	
Ribes roezlii ?	Sierra gooseberry	

Vascular plants of the Cedar Roughs Wildlife Area.

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Asterisks (*) indicate non-native species. Question marks (?) indicate species or subspecies not keyed or not positively identified.

HIPPOCASTANACEAE		
Aesculus californica	California buckeye	
HYDROPHYLLACEAE		
Nemophila heterophylla	woodland nemophila	
Nemophila pedunculata	meadow nemophila	
Phacelia distans	distant phacelia	
Phacelia imbricata ssp. *imbricata*	imbricate phacelia	
HYPERICACEAE		
*Hypericum perforatum**	Klamathweed, St. John's wort	invasive-B
JUGLANDACEAE		
Juglans hindsii ?	Northern California black walnut	
LAMIACEAE		
Marrubium vulgare	horehound	
*Mentha pulegium**	pennyroyal	
Mentha villosa ?		
Monardella villosa ssp. *villosa*	coyote mint	
Monardella viridis ssp. *viridis*	green monardella	
Pogogyne serpylloides	thyme-leaf mesa mint	
Salvia columbariae	chia	
Scutellaria californica	California skullcap	
Stachys albens	woolly hedge nettle	
Stachys ajugoides var. *rigida*	rigid hedge-nettle	
Trichostema laxum	turpentine-weed	
LAURACEAE		
Umbellularia californica	California bay	
LINACEAE		
Hesperolinon californicum	California western flax	
Hesperolinon serpentinum	Napa western flax	CNPS 1B
MALVACEAE		
Sidalcea diploscypha	fringed checkerbloom	
OLEACEAE		
Fraxinus dipetala	California ash	
Fraxinus latifolia	Oregon ash	

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Asterisks (*) indicate non-native species. Question marks (?) indicate species or subspecies not keyed or not positively identified.

ONAGRACEAE		
Camissonia graciliflora	hill sun cup	
Clarkia concinna	red ribbons	
Clarkia gracilis ssp*. tracyi*	Tracy's clarkia	CNPS 4
Clarkia purpurea ssp*. quadrivulnera*	four spot, winecup	
Clarkia unguiculata	elegant clarkia	
Epilobium ciliatum ssp*. glandulosum*	glandular willowherb	
Epilobium densiflorum	dense-flowered spike-primrose	
Epilobium minutum	little willow herb	
OROBANCHACEAE		
Orobanche fasciculata	clustered broom-rape	
PAPAVERACEAE		
Eschscholzia caespitosa	tufted poppy	
Eschscholzia californica	California poppy	
Platystemon californicus	California creamcups	
PLANTAGINACEAE		
Plantago erecta	dwarf plantain	
*Plantago lanceolata**	English plantain	
POLEMONIACEAE		
Gilia capitata	blue field-gilia	
Gilia tricolor ssp*. tricolor*	bird's-eye gilia	
Linanthus bicolor	baby stars	
Linanthus dichotomus	evening snow	
Linanthus parviflorus	common linanthus	
Navarretia jepsonii	Jepson's navarretia	CNPS 4
Navarretia pubescens	downy navarretia	
POLYGALACEAE		
Polygala californica	milkwort	
POLYGONACEAE		
Eriogonum nudum var*. nudum*	nudestem buckwheat	
Eriogonum luteolum var*. luteolum*	wicker buckwheat	
Polygonum lapathifolium	willow weed	
*Rumex conglomerata**	clustered dock, green dock	
Rumex salicifolius var*.* ?	willow-leaved dock	

Vascular plants of the Cedar Roughs Wildlife Area.

Compiled by Jake Ruygt. Additional editing by Gene Cooley (DFG) and Tina Fabula (DFG).
Asterisks (*) indicate non-native species. Question marks (?) indicate species or subspecies not keyed or not positively identified.

PORTULACACEAE		
Calandrinia ciliata	red maids	
Claytonia parviflora var*. parviflora*	small miner's lettuce	
Claytonia perfoliata var*. perfoliata*	common miner's lettuce	
PRIMULACEAE		
*Anagallis arvensis**	scarlet pimpernel	
Dodecatheon hendersonii	Henderson's shooting star	
RANUNCULACEAE		
Clematis lasiantha	chaparral virgin's bower	
Clematis ligusticifolia	western virgin's bower	
Delphinium hesperium ssp*. pallescens*	pale western larkspur	
Delphinium patens ssp*. patens*	Indian blue larkspur	
Delphinium uliginosum	swamp larkspur	CNPS 4
Delphinium variegatum ssp*. variegatum*	royal larkspur	
Myosurus apetalus	mouse-tail	
Ranunculus hebecarpus	delicate buttercup	
Ranunculus occidentalis	western buttercup	
RHAMNACEAE		
Ceanothus cuneatus var*. cuneatus*	buckbrush	
Ceanothus integerrimus	deerbrush	
Ceanothus jepsonii var*. albiflorus*	white-flowered musk brush	
Ceanothus oliganthus ssp*. sorediatus*	jim brush	
Rhamnus crocea	spiny redberry	
Rhamnus illicifolia	holly-leaf redberry	
Rhamnus tomentella ssp*. tomentella*	serpentine coffeeberry	
ROSACEAE		
Adenostoma fasciculatum	chamise	
Aphanes occidentalis	western lady's mantle	
Cercocarpus betuloides var*. betuloides*	mountain-mahogany	
Heteromeles arbutifolia	toyon, Christmas berry	
Potentilla glandulosa ssp*. glandulosa*	sticky cinquefoil	
Rosa californica	California rose	
*Rubus discolor**	Himalayan blackberry	
Rubus ursinus	California blackberry	
RUBIACEAE		
Galium aparine	goose-grass, cleavers	
Galium bolanderi	Bolander's bedstraw	

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Galium parisiense ?	wall bedstraw	
Galium porrigens var. *porrigens*	climbing bedstraw	
*Galium murale**	tiny bedstraw	
SALICACEAE		
Populus fremontii	Fremont's cottonwood	
Salix breweri	Brewer's willow	
Salix exigua	narrow-leaved willow	
Salix lasiolepis	arroyo willow	
Salix laevigata	red willow	
SAXIFRAGACEAE		
Lithophragma affine	woodland star	
Lithophragma heterophylla	hill star	
SCROPHULARIACEAE		
Antirhinnum vexillo-calyculatum	sail-flower snapdragon	
Castilleja applegatei ssp. *martinii*	Martin's paintbrush	
Castilleja attenuata	valley tassels	
Castilleja foliolosa	woolly Indian paintbrush	
Castilleja rubicundula ssp. *lithospermoides*	white cream sacs	
Collinsia heterophylla	Chinese-houses	
Collinsia sparsiflora var. *arvensis*	field collinsia	
Collinsia sparsiflora var. *sprasiflora*	few-flowered collinsia	
Cordylanthus pilosus ssp. *pilosus*	hairy bird's-beak	
Keckiella lemmonii ?	Lemmon's keckiella	
Mimulus aurantiacus	sticky monkeyflower	
Mimulus gutattus	seep-spring monkeyflower	
Pedicularis densiflora	Indian warrior	
Scrophularia californica	California figwort	
Tonella tenella	small-flowered tonella	
Tryphysaria eriantha	butter and eggs	
Verbascum spp.*	mullein	
*Veronica catenata**	chain speedwell	
SIMAROUBACEAE		
*Ailanthus altissima**	tree-of-heaven	invasive-A2
SOLANACEAE		
Solanum parishii	Parish's nightshade	
TAMARICACEAE		
*Tamarix parviflora**	small-flowered tamarisk	invasive-A1

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VALERIANACEAE		
Plectritis ciliosa ssp. *ciliosa*	long-spurred plectritis	
Plectritis ciliosa ssp. *insignis*	showy plectritis	
Plectritis congesta	sea blush	
Flowering Plants – Monocots		
CYPERACEAE		
Carex nudata ?	torrent sedge	
Carex serratodens	serpentine sedge	
Eleocharis macrostachya	creeping spikerush	
Scirpus tuberosus	tubered bulrush	
IRIDACEAE		
Iris macrosiphon	bowl-tubed onion	
Sisyrinchium bellum	blue-eyed grass	
JUNCACEAE		
Juncus mexicanus	Mexican rush	
Juncus oxymeris	pointed rush	
LILIACEAE		
Alium amplectans	narrow-leaved onion	
Allium falcifolium	sickle-leaf onion	
Allium fimbriatum var. *fimbriatum*	fringed onion	
Brodiaea elegans	harvest brodiaea	
Calochortus amabilis	diogenes lantern	
Calochortus luteus	gold nuggets	
Chlorogalum pomeridianum var. *pomeridianum*	wavyleaf soap plant	
Dichelostemma capitatum ssp. *capitatum*	blue dicks	
Dichelostemma congestum	fork-toothed ookow	
Fritillaria affinis var. *affinis*	checker lily	
Triteleia hyacinthina	white brodiaea	
Triteleia laxa	Ithuriel's spear	
Zigadenus fremontii ?	Fremont's star lily	
Zigadenus micranthus var. *fontanus*	marsh zigadenus	CNPS 4
ORCHIDACEAE		
Epipactis gigantea	stream orchid	
POACEAE		
*Aegilops triuncialis**	barbed goat grass	

Vascular plants of the Cedar Roughs Wildlife Area.

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Asterisks (*) indicate non-native species. Question marks (?) indicate species or subspecies not keyed or not positively identified.

Agrostis microphylla	small-leaved bentgrass	
*Aira caryophyllea**	silver European hairgrass	
*Bromus hordeaceus**	soft cheat	
Bromus laevipes	woodland brome	
*Bromus sterilis**	poverty brome	
Deschampsia danthonioides	annual hairgrass	
Elymus glaucus ssp. *glaucus*	blue wild-rye	
*Gastridium ventricosum**	nitgrass	
Koeleria micrantha	Junegrass	
Leymus triticoides	creeping wild-rye	
Melica californica	California melic	
Melica torreyana	Torrey's melic	
Nassella lepida	foothill needlegrass	
Nassella pulchra	purple needlegrass	
Poa secunda ssp. *secunda*	one-sided bluegrass	
*Taeniantherum caput-medusae**	medusa-head	
Trisetum canescens	nodding trisetum	
Vulpia microstachys ssp. *pauciflora*	Nuttall's foxtail	
TYPHACEAE		
Typha domingensis ?	southern cattail	

Status Key:
Special Status Plants – taken from The California Native Plant Society's (CNPS) Lists
1A. Presumed extinct in California
1B. Rare or Endangered in California and elsewhere
2. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Invasive Plants – taken from the 1999 Cal-Invasive Plant Council List:
List A-1--Most Invasive Wildland Pest Plants; Widespread
List A-2-- Most Invasive Wildland Pest Plants; Regional
List B-- Wildland Pest Plants of Lesser Invasiveness

Appendix E.
Birds of the Cedar Roughs Wildlife Area

Bird species found breeding in the vicinity of the Cedar Roughs Wildlife Area taken from the *Breeding Birds of Napa County, California* (Berner et al. 2003), plus species incidentally observed during a 2003-2004 weed inventory and observed during a 2003 tamarisk study in Pope Creek.

Common and Latin Name	Probable status near CRWA*	Napa County Breeding Bird Atlas**	Observed during 2003-2004 weed inventory***	Observed during 2003 UC Berkeley tamarisk study
HERONS, BITTERNS				
Great Blue Heron (*Ardea herodias*)	YR			X
Green Heron (*Butorides virescens*)	YR	Confirmed		
Black-crowned Night Heron (*Nycticorax nycticorax*)	YR			X
VULTURES				
Turkey Vulture (*Cathartes aura*)	YR	Possible		
DUCKS, GEESE, SWANS				
Canada Goose (*Branta canadensis*)	I	Possible		X
Gadwall (*Anas strepera*)	I	Possible		
Wood Duck (*Aix sponsa*)	YR			X
Mallard (*Anas platyrhynchos*)	YR	Confirmed		X
Common Merganser (*Mergus merganser*)	YR?			X
Ruddy Duck (*Oxyura jamaicensis*)	YR	Possible		
OSPREY				
Osprey (*Pandion haliaetus*)	YR	Possible		
HAWKS, KITES, EAGLES				
White-tailed Kite (*Elanus leucurus*)	YR	Possible		
Cooper's Hawk (*Accipiter cooperii*)	YR	Possible		
Red-shouldered Hawk (*Buteo lineatus*)	YR	Confirmed		
Red-tailed Hawk (*Buteo jamaicensis*)	YR	Confirmed		X
FALCONS				
American Kestrel (*Falco sparverius*)	YR	Confirmed	X	
QUAIL				
Mountain Quail (*Oreortyx pictus*)	YR	Probable		
California Quail (*Callipela californica*)	YR	Confirmed		X
RAILS, COOTS				
American Coot (*Fulica americana*)	YR	Probable		
PLOVERS				
Killdeer (*Charadrius vociferus*)	YR	Confirmed		
SHOREBIRDS				
Spotted Sandpiper (*Actitis macularia*)	SR	Confirmed		

Bird species found breeding in the vicinity of the Cedar Roughs Wildlife Area taken from the *Breeding Birds of Napa County, California* (Berner et al. 2003), plus species incidentally observed during a 2003-2004 weed inventory and observed during a 2003 tamarisk study in Pope Creek.

Common and Latin Name	Probable status near CRWA*	Napa County Breeding Bird Atlas**	Observed during 2003-2004 weed inventory***	Observed during 2003 UC Berkeley tamarisk study
DOVES				
Mourning Dove (*Zenaida macroura*)	YR	Confirmed	X	X
TYPICAL OWLS				
Western Screech Owl (*Otus kennicottii*)	YR	Possible		
Great Horned Owl (*Bubo virginianus*)	YR	Confirmed		
HUMMINGBIRDS				
Anna's Hummingbird (*Calypte anna*)	YR	Confirmed		X
Allen's Hummingbird (*Selasphorus sasin*)	SR	Possible		
KINGFISHERS				
Belted Kingfisher (*Ceryle alcyon*)	YR	Possible		
WOODPECKERS				
Acorn Woodpecker (*Melanerpes formicivorous*)	YR	Confirmed		X
Nuttall's Woodpecker (*Picoides nuttallii*)	YR	Possible		X
Hairy Woodpecker (*Picoides villosus*)	YR	Possible		X
Northern (Red-shafted) Flicker (*Colaptes auratus*)	YR	Possible	X	X
Pileated Woodpecker (*Dryocopus pileatus*)	YR			X
TYRANT FLYCATCHERS				
Olive-Sided Flycatcher (*Contopus borealis*)	SR	Possible		
Pacific-slope Flycatcher (*Empidonax difficilis*)	SR	Probable		
Black Phoebe (*Sayornis nigricans*)	YR	Confirmed		X
Ash-throated Flycatcher (*Myiarchus cinerascens*)	SR	Confirmed		X
Western Kingbird (*Tyrannus verticalis*)	SR	Confirmed		X
JAYS, CROWS				
Steller's Jay (*Cyanocitta cristata*)	YR	Probable		
Western Scrub-Jay (*Aphelocoma californica*)	YR	Confirmed	X	X
American Crow (*Corvus brachyrhynchos*)	YR	Possible		X
Common Raven (*Corvus corax*)	YR	Confirmed		
SWALLOWS				
Tree Swallow (*Tachycineta bicolor*)	YR	Possible		X
Violet-green Swallow (*Tachycineta thalassina*)	SR	Probable		X
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)	SR	Possible		
Cliff Swallow (*Hirundo pyrrhonota*)	SR	Confirmed	X	
Barn Swallow (*Hirundo rustica*)	SR	Possible		
TITMOUSE				
Oak Titmouse (*Parus inornatus*)	YR	Confirmed		X
CHICKADEES				
Chestnut-backed Chickadee (*Poecile rufescens*)	YR	Possible		X

Bird species found breeding in the vicinity of the Cedar Roughs Wildlife Area taken from the *Breeding Birds of Napa County, California* (Berner et al. 2003), plus species incidentally observed during a 2003-2004 weed inventory and observed during a 2003 tamarisk study in Pope Creek.

Common and Latin Name	Probable status near CRWA*	Napa County Breeding Bird Atlas**	Observed during 2003-2004 weed inventory***	Observed during 2003 UC Berkeley tamarisk study
BUSHTIT				
Bushtit (*Psaltriparus minimus*)	YR	Confirmed	X	
NUTHATCHES				
White -breasted Nuthatch (*Sitta carolinensis*)	YR	Confirmed	X	
CREEPER				
Brown Creeper (*Certhia americana*)	YR			X
WRENS				
Rock Wren (*Salpinctes obsoletus*)	YR	Confirmed		
Bewick's Wren (*Thryomanes bewickii*)	YR	Probable		X
House Wren (*Troglodytes aedon*)	SR	Confirmed		
KINGLETS				
Ruby-crowned Kinglet (*Regulus calendula*)	W		X	X
GNATCATCHERS				
Blue-gray Gnatcatcher (*Polioptila caerulea*)	SR			X
THRUSHES, BLUEBIRDS, SOLITARIES				
Western Bluebird (*Sialia mexicana*)	YR	Confirmed		X
Hermit Thrush (*Catharus guttatus*)	W		X	
American Robin (*Turdus migratorius*)	YR	Probable	X	X
WRENTITS				
Wrentit (*Chamaea fasciata*)	YR	Probable	X	X
MOCKINGBIRDS, THRASHERS				
Northern Mockingbird (*Mimus polyglottos*)	YR			X
California Thrasher (*Toxostoma redivivum*)	YR	Possible	X	
STARLINGS				
European Starling (*Sturnus vulgaris*)	YR	Confirmed		X
WOOD WARBLERS				
Orange-crowned Warbler (*Vermivora celata*)	SR	Confirmed	X	
Nashville Warbler (*Vermivora ruficapilla*)	M			
Yellow Warbler (*Dendroica petechia*)	SR	Possible		
Black-throated Gray Warbler (*Dendroica nigrescens*)	SR	Possible		
Yellow-rumped Warbler (*Dendroica coronata*)	W			X
Wilson's Warbler (*Wilsonia pusilla*)	SR	Confirmed		
SPARROWS, TOWHEES				
Spotted Towhee (*Pipilo maculatus*)	YR	Confirmed	X	X
California Towhee (*Pipilo crissalis*)	YR	Confirmed	X	X
Rufous-crowned Sparrow (*Aimophila ruficeps*)	YR	Confirmed		
Chipping Sparrow (*Spizella passerina*)	SR			X

Bird species found breeding in the vicinity of the Cedar Roughs Wildlife Area taken from the *Breeding Birds of Napa County, California* (Berner et al. 2003), plus species incidentally observed during a 2003-2004 weed inventory and observed during a 2003 tamarisk study in Pope Creek.

Common and Latin Name	Probable status near CRWA*	Napa County Breeding Bird Atlas**	Observed during 2003-2004 weed inventory***	Observed during 2003 UC Berkeley tamarisk study
SPARROWS, TOWHEES (continued)				
Lark Sparrow (*Chondestes grammacus*)	YR	Confirmed		X
Savannah Sparrow (*Passerculus sandwichensis*)	YR	Probable		
Song Sparrow (*Melospiza melodia*)	YR	Probable		X
Lincoln's Sparrow (*Melospiza lincolnii*)	W		X	
Dark-eyed Junco (*Junco hyemalis*)	YR			X
White-crowned Sparrow (*Zonotrichia leucophyrs*)	W			X
Golden-crowned Sparrow (*Zonotrichia atricapilla*)	W		X	
GROSBEAKS, BUNTINGS				
Black-Headed Grosbeak (*Pheucticus melanocephalus*)	SR	Confirmed		X
MEADOWLARKS, BLACKBIRDS, ORIOLES				
Red-winged Blackbird (*Agelaius phoeniceus*)	YR	Confirmed		X
Tricolored Blackbird (*Agelaius tricolor*)	SR	Confirmed		
Western Meadowlark (*Sturnella neglecta*)	YR	Confirmed		
Brewer's Blackbird (*Euphagus cyanocephalus*)	YR	Confirmed		
Brown-Headed Cowbird (*Molothrus ater*)	SR	Probable		
Northern (Bullock's) Oriole (*Icterus galbula*)	SR	Confirmed		
FINCHES, GOLDFINCHES				
Purple Finch (*Carpodacus purpureus*)	YR	Confirmed		
House Finch (*Carpodacus mexicanus*)	YR	Confirmed		X
Lesser Goldfinch (*Carduelis psaltria*)	YR	Confirmed		X
American Goldfinch (*Carduelis tristis*)	YR			X
WEAVER FINCHES				
House Sparrow (*Passer domesticus*)	YR	Possible		

*Status: YR = year round resident, SR = spring/summer resident, W = winter resident, I = incidental.
**Breeding status in blocks containing the CRWA (555275 and 555270) from the *Breeding Birds of Napa County* (Berner et al. 2003).
***Birds observed incidentally while conducting targeted surveys for weeds.

Appendix F.
Prioritized Control Plans for Non-native Invasive Plant Species at the Cedar Roughs Wildlife Area

********Note: the proposed measures are as recommended primarily by Bossard et al. (2000) and by Element Stewardship Abstracts produced by the Nature Conservancy and available at http://tncweed.ucdavis.edu/esadocs/.*

Scientific name: Aegilops triuncialis
***Common name*: Barbed Goatgrass**
Updated 9/2003

PRIORITY 1

❖ Description

Barbed goatgrass is an annual grass native to Eurasia that reproduces in late spring (seedheads ripen by late-May to mid-June). Barbed seedheads allow seeds to be easily transported from site to site by wild and domestic animals, and they are also transported by moving water. Goatgrass can spread rapidly, progressing from initial invasion to dominance of an entire ranch within 20 years.

❖ Current Distribution on the Site and Treatments to Date

Barbed goatgrass is at the very earliest stages of invasion at the CRWA. In November 2003, University and Department personnel discovered a single patch along a trail in the Lake Berryessa Unit. This patch was approximately 1 meter wide and 20 meters long. No other occurences of goatgrass were discovered along any of the trails or in any of the grasslands at the CRWA. This patch was sprayed with Roundup in April 2004.

❖ Damange and Threats

Goatgrass is particularly threatening to the biological goals for the CRWA because it can invade serpentine grasslands and seeps, which harbor many of the special status plants at the Wildlife Area and which are refugia for many native grasses and forbes that are displaced in non-serpentine grasslands by invasive European annual grasses. Goatgrass can form dense stands that crowd out most native species.

❖ Measurable Goals and Objectives

Eradicate barbed goatgrass from the CRWA and immediate vicinity. Monitor regularly to catch any recurrent establishment.

❖ Management Options

Management options for goatgrass include prevention of new infestations and eradication of the existing infestation.

Prevention—Prevention will include reducing the likelihood of seed introductions into uninfested areas and avoiding conditions that may increase its seed establishment (e.g., areas of disturbed soil). Examples of strategies to prevent seed introductions include (1) aggressive monitoring to enable early detection and rapid eradication of nascent foci, and (2) educating the public and Department staff members on how to

identify goatgrass and remove seedheads from their clothing, pets, and vehicle undercarriages when leaving goatgrass-infested areas.

Eradication and control

- *Controlled burning:* Burning is believed to be the cheapest and most practical form of goatgrass control on large areas of infested land (DiTomaso et al. 2001). Research conducted at Hopland Field Station found that two successive years of controlled burning can virtually eliminate stands of goatgrass (DiTomaso et al. 2001). Timing is critical, with optimal results achieved by burning late in the spring before seed heads mature (DiTomaso et al. 2001; Peters et al. 1996). Burning during this time may favor the proliferation of native grasses, and thus have beneficial effects on a larger component of the plant community. Where burning is not feasible, alternatives, such as weed toasters, which apply intense localized heating, should be experimented with to determine their effectiveness as substitutes for fire.

- *Mowing:* Mowing alone has been reported to be an ineffective control agent because short or bent over seed stalks can be missed (Talbot and Smith 1930). Mowing may also encourage goatgrass because mowed plants can produce seed within a month after cutting. Marin Agricultural Land Trust reported on their website that mowing at end of growing season, but before seed set may be effective. Mowing may also be effective when combined with other treatments (Peters et al. 1996).

- *Grazing:* Heavy grazing by domestic livestock may control the spread of goatgrass by preventing its seeds from ripening (Peters et al. 1996). However, the timing of grazing is critical: it must be conducted in early spring before plants form awns. If grazed too late, livestock will selectively graze more palatable plants and leave goatgrass, and will also spread seeds (Kennedy 1928). Grazing may be a risky management treatment because cattle tend to avoid goatgrass (Jacobsen 1929). Because heavy grazing is be required to reduce infestations and appropriate timing is during the later part of the peak phenology period (Peters et al. 1996), there exists the danger that the levels of grazing required to reduce goatgrass may also reduce the cover of more palatable and otherwise desirable native plants and create areas of disturbed soil that are vulnerable invasions.

- *Chemical control:* Application of 0.38-0.75 lb/acre of glyphosate (Roundup) has been shown to be effective in spot control of small patches (Peters et al. 1996), but as it is non-selective, it is not suitable for large areas. Treatments should be conducted in the spring after plants have tillered, but before flowering. However, the authors of this study stated that treated areas should be reseeded with appropriate perennial grass/clover mixture.

- *Native restoration:* Reseeding and restoration of native species should be conducted following herbicide treatments to replace plant cover (DiTomaso et al. 2001).

❖ **Actions Planned (Treatment and Monitoring)**

Spring 2005: Revisit existing infestation. Spray new plants with Roundup. Survey surrounding area for nascent foci that may have escaped detection. Survey all trails and serpentine grasslands for new infestations.
Spring 2006: Revisit existing infestation. Spray new plants with Roundup. Continue to survey all trails and grasslands annually.

Scientific name: Tamarix parviflora
***Common name*: tamarisk, salt cedar**
Updated 9/2003

PRIORITY 2

❖ Description

Tamarisk is a many-branched shrub or tree less than 26 feet tall with small, with scale-like leaves that contain salt glands, and small white to deep-pink flowers.

❖ Current Distribution on the Site and Treatments to Date

Most tamarisk on the CRWA is concentrated in the riparian corridor of Pope Creek. At least one, but not more than a few individual plants occur along Maxwell Creek. Ultimately the Department would like to see tamarisk eradicated from Pope Creek, both within and outside the CRWA. Efficient tamarisk eradication along Pope Creek will require coordination with landowners and land managers both upstream and downstream of the CRWA Pope Creek. Because the Department manages only short segments of Pope Creek and because of the cost and complexity of organizing a large-scale cooperative eradication effort, the interim goal of the Department will be to eradicate tamarisk from Maxwell Creek and prevent its reintroduction. No tamarisk control has occurred within the CRWA to date.

❖ Damage and Threats

Tamarisk has the ability to crowd out native riparian species, reducing both plant and animal diversity, and increasing soil salinity to favor itself. It also alters hydrology, drying up springs and riparian areas and streams and lowering surface water tables.

❖ Measurable Goals and Objectives

Eradicate tamarisk from Maxwell Creek, monitor treated infestations for resprouting, work with the BRBNA conservation partnership to explore a cooperative eradication effort in the Pope Creek watershed.

❖ Management Options

Prevention—Annual surveys to enable early detection and control, as well as prevention of seed introductions and disturbances that contribute to its success (fire, increased soil salinity, soil disturbance, etc) are critical to limiting tamarisk's distribution.

Eradication and control

- *Physical control:* Manual/mechanical methods do little to control tamarisk, since it resprouts vigorously following cutting or burning. Root plowing and cutting can

clear heavy infestations, but only when followed up with herbicide treatments. Seedlings and small plants can be hand pulled. Fire does not kill tamarisk roots, but helps to thin heavy infestations, while flooding for 1-2 years can kill most salt cedar plants in a thicket (Lovich 2000).

- *Biological control:* Insects and fungi are currently being tested for tamarisk control. Cattle have been shown to consume considerable amounts of sprout growth (Lovich 2000).

- *Chemical control:* Heavy infestations often require stand thinning through controlled burns and/or mechanical removal prior to herbicide application. Herbicides commonly used to combat tamarisk include imazapyr (e.g., Stalker, Arsenal), triclopyr (e.g., Garlon), and glyphosate (e.g., Roundup, Rodeo) (Lovich 2000). Triclopyr is typically applied to stumps after cutting. Perhaps the most effective technique is to apply imazapyr as “Arsenal” to the foliage, especially when a tank mix is used with a glyphosate herbicide such as Rodeo or RoundupPro (Lovich 2000). Arsenal is not registered for use in California, but "Stalker" is another imazapyr-based herbicide that is.

- *Integrated control:* The most frequently used method in California is to cut the shrub off to within 5 cm of the ground and apply triclopyr, either as Garlon 4 or Garlon 3A to the stump and around the perimeter of the cut stems within 1 minute of cutting, the latter of which should be applied during the growing season (Lovich 2000). Foliar application of herbicides to resprouts should be conducted within 4-12 months, and are best conducted with glyphosate or imazapyr; best results are achieved via application in late spring to early fall during good growing conditions (Lovich 2000).

❖ **Actions Planned (Treatments and monitoring)**

Spring 2005: Spray plants along Maxwell Creek with "Stalker."
Summer 2005: Survey for resprouting, continued treatments as needed.

Scientific name: Dipsacus sativus
***Common name*: Teasel**
Updated 9/2003

PRIORITY 3

❖ Description

Teasel is a non-native biennial forb that stands 3-6 feet tall, produces a basal rosette for at least one year during which time it extends a deep tap root, and flowers between June and September. Teasel's unique inflorescence makes the plant readily identifiable when blooming. It tends to prefer mesic habitats, but can invade drier sites.

❖ Current Distribution on the Site and Treatment to Date

Teasel occurs in only a single isolated location in the Maxwell Creek Unit near where the northern boundary of the Unit intersects the south bank of Pope Creek.

❖ Damage and Threats

Teasel can invade serpentine seeps and displace special status plants species and other native species that occur in this habitat. It also tolerates drier sites, and thus poses the threat of invading neighboring grasslands.

❖ Measurable Goals and Objectives

Eradicate teasel from the CRWA by summer 2005.

❖ Control Options

- *Physical control*—For the small patch of teasel on the CRWA, mechanically removing existing plants before seed set during early summer (e.g., with a machete) year after year until there no longer resprouts, and then pulling any seedlings or young rosettes during early-mid spring should prove effective. Once flowering has begun, the flowering heads should be cut off and removed from the site, because immature seed heads left in place can still develop some viable seeds. Cutting off the flowering stalks just at flowering time will usually prevent resprouting from the root crown.

- *Integrated control*—Following mechanical removal, wick application of herbicide to the remaining rosette is recommended, though this could pose a threat to seep habitats.

- *Monitoring*—The site should be monitored annually to detect resprouts, and additional treatments applied accordingly.

❖ **Actions Planned (Treatments and monitoring)**

Late spring – early summer, 2005: Mechanically remove teasel infestation.
Late spring – early summer, 2006: Survey and continue removal as necessary

Scientific name: Ailanthus altissima
***Common name*:** tree-of-heaven
Updated 9/2003

PRIORITY 4

❖ Description

Tree of heaven is native to Asia. It is a deciduous tree, thirty to sixty feet high, with large pinnately compound leaves. It has been planted extensively as an ornamental in Europe and the United States until the late 1800s.

❖ Current Distribution on the Site and Treatments to Date

Tree-of-heaven is concentrated in areas around past settlements and intensive human activity and in riparian areas. At the CRWA it occurs in both Units. At the Lake Berryessa Unit it occurs in a small clearing near an old cabin or barn above the south bank of Pope Creek. In the Maxwell Creek Unit it occurs in a single stand along Maxwell Creek. In May 2004, Department personnel treated the infestation at the Lake Berryessa Unit (one large old tree and about 30 sucker sprouts of varying heights) with 30% Garlon in an oil mixture using a basal bark treatment for sprouts and by cutting into the bark and applying herbicide to the cambium of the large tree. In August 2004, only about 50% of the sprouts were dead and the large tree showed only minor signs of die-off indicating that the treatment will need to be re-treated.

Damage and Threats

Tree-of-heaven can spread by seed as well as by root sprouts, but its primary threat is its ability to form dense thickets from root sprouts. These thickets can displace native species in riparian areas.

❖ Measurable Goals and Objectives

Eradicate tree-of-heaven from the CRWA by summer 2007.

❖ Management Options

- *Physical control*—Tree-of-heaven can be killed by cutting or girdling, but death of the main stem usually promotes prolific root sprouting, even when stumps are treated with herbicide.

- *Chemical control*—Small sprouts may be killed by a foliar application of glyphosate (Roundup), and larger sprouts with an application of 15-20% triclopyr (Garlon) to all of the bark in the first 20 inches of the stem. On larger trees, the bark must be removed and the cambium exposed before applying herbicide. There is some evidence that this technique is most efficient if the entire trunk is not girdled prior to applying herbicide. Leaving 1 to 2 inches of bark intact

between cuts prevents the tree's emergency response and results in ultimate death of the main stem without root sprouts.

- **Actions Planned (Treatments and monitoring)**

Summer 2005: Apply a hack and squirt technique with Garlon to large trees in both units. Apply Garlon directly to sprouts.
Summer 2006: Monitor results of previous treatment, re-treat or modify treatment as necessary. Monitor annual until there is no evidence of resprouts.

Scientific name: Centaurea solstitialis
***Common name*: Yellow starthistle**
Updated 9/2003

PRIORITY 5

❖ Description

Yellow starthistle is an annual to biennial forb that germinates in the fall and produces a rosette during early spring, during which time it extends a deep taproot downward. It bolts in the late spring after annual grasses senesce and flowers during late June-August.

❖ Current Distribution on the Site and Treatments to Date

Starthistle has limited distribution within the CRWA, because it typically does not invade serpentine soils. The primary infestation is the floodplain along Maxwell Creek at the south end of the Maxwell Creek Unit.

❖ Damage and Threats

Starthistle reduces native biodiversity by forming monospecific stands, and can hinder the establishment, reproduction, and persistence of native species (DiTomaso and Gerlach 2000). It also degrades wildlife habitats and hinders public access.

❖ Measurable Goals and Objectives

Reduce starthistle cover along Maxwell Creek and prevent spread into uninfested areas.

❖ Management Options

- *Physical control:* repeated mowing/weed wacking during the early flowering or bolting stage; or hand pulling of smaller infestations during the same stages, may work, but may also negatively impact late-season forbs.

- *Controlled burning:* prescribed fire during the early flowering or bolting stage has been shown to reduce seed production, and three years of it may almost entirely remove infestations and seed banks (DiTomaso et al. 1999). It may also reduce the cover of barb goatgrass and medusahead (DiTomaso 2000). Such burns are likely to also reduce the cover of additional exotics, including goatgrass and medusahead, and may therefore be applied as part of a whole-systems approach to restoring communities from starthistle invasion.

- *Carefully timed controlled grazing:* during the bolting stage, grazing by goats, especially has been shown to reduce seed production (Thomsen et al. 1993;

DiTomaso 2000), though the intensity of grazing required may be detrimental to native species and soils, and inputs of urine and dung may increase soil fertility and invasibility (Thomsen et al. 1993; Tu et al. 2001).

- *Chemical control:* early season application of Clopyralid (Transline) has been shown to dramatically reduce starthistle cover when applied at low levels (1.5-4 oz/acre) from January to May, but has detrimental effects on some native species within the Apiaceae, Asteraceae, Fabaceae, Polygonaceae, Solanaceae, and Violaceae families and has residual effects on soils for 1 year.

- *Biological control:* Six biological control species have been introduced to reduce yellow starthistle abundance, but are only roughly 40% effective (DiTomaso 2002). Some reports indicate that these insects are beginning to have an increasingly pronounced effect on this weed.

- *Restoration:* Native species such as perennial bunchgrasses and tarweeds have been shown to increase the resistance of habitats to starthistle invasion (Dukes 2002; Gelbard 2003). Fortunately, controlled burns timed to reduce starthistle reproduction and cover have been shown to favor native bunchgrass species such as *Nassella pulchra* (DiTomaso et al. 1999).

Overall, several years of integrated treatments may be necessary to reduce cover of yellow starthistle and to restore invaded habitats.

Scientific name: Taeniatherum caput-medusae
***Common name*: Medusahead**
Updated 1/2005

PRIORITY 6

❖ Description

Medusahead is an annual grass that forms dense stands in California grasslands, including serpentine grasslands. Medusahead matures one to four weeks later than most other annual grasses: flowering occurs in May and seeds usually disperse by mid-summer (Kan and Pollak 2000).

❖ Current Distribution on the Site and Treatments to Date

Medusahead occurs in most grasslands within the CRWA, although generally at low density because of the serpentine influence.

❖ Damage and Threats

Medusahead reduces native biodiversity by forming dense monospecific stands. Unlike most annual grasses, the silica-rich plants do not break down over the winter and usually form a dense thatch that hinders the establishment, reproduction, and persistence of native species (Kan and Pollak 2000).

❖ Measurable Goals and Objectives

Reduction in the cover of medusahead will be difficult, because it is widespread the the CRWA and because it occurs in grasslands mixed with many native species, including some special-status serpentine endemics. It will be a challenge to reduce the cover of medusahead without also negatively impacting native species. Medusahead control at the CRWA, if feasible, will target only high-density patches.

❖ Management Options

- *Physical control:* Mowing can be effective, but because of the difficult access, mowing at the CRWA would have to be done with hand tools (e.g., gas powered line trimmers).

- *Controlled burning:* Prescribed buring is probably the most effect means for controlling medusahead (Kan and Pollak 2000). Prescribed burns can take advantage of the fact that medusahead flowers later than other species, so that many native species will have already dropped their seed when burning occurs. Burning should occur in late spring prior to seed drop. The lack of vehicle access if the primary impediment to conducting prescribed burns at the CRWA. In addition, because of the high density of special-status plants in and around

medusahead populations, firelines should be made using methods (e.g., blacklining, weed-trimmers) that minimize surface disturbance.

- *Carefully timed controlled grazing:* Grazing in early spring, when medusahead is still palatable, can reduce but not eliminate medusahead infestations.

- *Chemical control:* Small, but dense patches of medusahead could be treated with herbicides.

Realistic options for medusahead control at CRWA are limited, primarily due to difficult access.

Appendix F References

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Talbot, M. W., and L. S. Smith. 1930. The goatgrass situation in California. The Monthly Bulletin, Department of Agriculture, State of California 19:40-46.

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Appendix G.
Notice of Completion, Environmental Checklist and Negative Declaration

Form A

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044 916/445-0613

SCH # _____

Project Title: Cedar Roughs Wildlife Area Management Plan

Lead Agency: Dept. of Fish and Game | Contact Person: Tina Fabula

Street Address: P.O. Box 47 | Phone: (707) 944-5538

City: Yountville | Zip: 94599 | County: Napa

Project Location:

County: Napa | City/Nearest Community: Berryessa Pines, Angwin, or Lower Lake

Cross Streets: Pope Canyon Road and Berryessa Knoxville Road | Zip Code: no zip | Total Acres: 413

Assessor's Parcel No. several | Section: parts-17, 18, 20 | Twp. 9N | Range: 4W | Base: MDBM

Within 2 Miles: State Hwy #: none | Waterways: Lake Berryessa

Airports: none | Railways: none | Schools: none

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☒ Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.)_____ ☐ Other _____

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other_____

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan

☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other Mgmt. Plan

Development Type:

☐ Residential: *Units*_____ *Acres*_____

☐ Office: *Sq.ft.*_____ *Acres*_____ *Employees*_____

☐ Commercial: *Sq.ft.* _____ *Acres*_____ *Employees*_____

☐ Industrial: *Sq.ft.* _____ *Acres*_____ *Employees*_____

☐ Educational _____

☐ Recreational _____

☐ Water Facilities: *Type*_____ *MGD*_____

☐ Transportation: *Type*_____

☐ Mining: *Mineral*_____

☐ Power: *Type*_____ *Watts*_____

☐ Waste Treatment: *Type*_____

☐ Hazardous Waste: *Type*_____

☒ Other: Fish and Game Wildlife Area Management Plan

Funding (approx.):

Federal $ none | State $ 49,999.00 | Total $ 49,999.00

Project Issues Discussed in Document:

☐ Aesthetic/Visual
☒ Agricultural Land
☐ Air Quality
☒ Archeological/Historical
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☐ Geologic/Seismic
☐ Minerals
☐ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☐ Solid Waste
☐ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☐ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☐ Growth Inducing
☐ Landuse
☐ Cumulative Effects
☐ Other _____

Present Land Use/Zoning/General Plan Designation:

Napa County General Plan zoning: AW: agricultural - watershed.

Project Description:

The project is the Management Plan for the Cedar Roughs Wildlife Area. The Plan discusses the area's primary purpose, appropriate recreational uses, biological resources on site, and potential management activities.

Revised 3-31-99

Reviewing Agencies Checklist

Form A, continued

KEY
S = Document sent by lead agency
X = Document sent by SCH
✓ = Suggested distribution

_____**Resources Agency**
_____Boating & Waterways
_____Coastal Commission
_____Coastal Conservancy
_____Colorado River Board
_____Conservation
_____Fish & Game
_____Forestry & Fire Protection
_____Office of Historic Preservation
_____Parks & Recreation
_____Reclamation Board
_____S.F. Bay Conservation & Development Commission
_____Water Resources (DWR)

Business, Transportation & Housing
_____Aeronautics
_____California Highway Patrol
_____CALTRANS District #_____
_____Department of Transportation Planning (headquarters)
_____Housing & Community Development

_____**Food & Agriculture**

Health & Welfare
_____Health Services _____

State & Consumer Services
_____General Services
_____OLA (Schools)

Environmental Protection Agency
_____Air Resources Board
_____California Waste Management Board
_____SWRCB: Clean Water Grants
_____SWRCB: Delta Unit
_____SWRCB: Water Quality
_____SWRCB: Water Rights
_____Regional WQCB #_____ (_____)

Youth & Adult Corrections
_____Corrections

Independent Commissions & Offices
_____Energy Commission
_____Native American Heritage Commission
_____Public Utilities Commission
_____Santa Monica Mountains Conservancy
_____State Lands Commission
_____Tahoe Regional Planning Agency

_____Other _____

Public Review Period (to be filled in by lead agency)

Starting Date _____ Ending Date _____

Signature _____ Date _____

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: (_____) _____

Applicant: Department of Fish and Game
Address: P.O. Box 47
City/State/Zip: Yountville, CA 94599
Phone: (707) 944-5500

For SCH Use Only:

Date Received at SCH _____
Date Review Starts _____
Date to Agencies _____
Date to SCH _____
Clearance Date _____
Notes:

FINAL ENVIRONMENTAL CHECKLIST / NEGATIVE DECLARATION

The Cedar Roughs Wildlife Area Management Plan is a project under the California Environmental Quality Act (CEQA) that requires environmental analysis. This Appendix includes the full text of the Initial Study/Negative Declaration that was prepared in conformance with the requirements of the State CEQA Guidelines.

1. **Project title: Cedar Roughs Wildlife Area Management Plan**

2. **Lead agency name and address:**
   California Department of Fish and Game
   Post Office Box 47
   Yountville, CA 94599

3. **Contact person and phone number:**
   Tina Fabula
   (707) 944-5538

4. **Project location**: The Wildlife Area is one mile northwest of Lake Berryessa off Pope Canyon Road. Pope Canyon Road runs along the northern boundary of the two discrete units of the Wildlife Area.

5. **Project sponsor's name and address**:
   California Department of Fish and Game
   Post Office Box 47
   Yountville, CA 94599

6. General plan designation:
   Agriculture/Watershed/Open Space

7. Zoning:
   Agricultural/Watershed

8. Description of project:
   The project is the Management Plan for the Cedar Roughs Wildlife Area. The primary purpose of the Wildlife Area is to protect and enhance habitat for wildlife species, and to provide the public with compatible, wildlife-related recreational uses. In addition, the Cedar Roughs Wildlife area was acquired to provide public access and hunting opportunities to the Bureau of Land Management's Cedar Roughs Wilderness Study area. The Cedar Roughs Wildlife Area provides habitat for Special Status species, game species and other native species.

   The Plan provides a description of the Wildlife Area and its environment with emphasis on the natural ecological processes and native and non-native plants and animals that exist there. It also includes an evaluation of public uses that are compatible with the purpose of the Wildlife Area, and an evaluation of the appropriateness of adopting a State Wilderness designation.

   This Initial Study is intended to consider the whole of the project. As such, this project and this Negative Declaration includes the following components:

- The ongoing operation of the Wildlife Area including the public uses incorporated in this Plan.
- Maintenance activities to sustain the oak woodland, riparian, chaparral and grassland habitats including control of nonnative, invasive species.
- Installation of minor improvements to the Wildlife Area that do not involve substantial physical disruption of the Wildlife Area, such as parking areas, fencing, signage, wildlife water supply, and possibly restrooms.
- Maintenance of existing roads or trails and other improvements to the Wildlife Area.
- The monitoring of plant and animal populations, public use, and related scientific research.
- Ongoing coordination with public agencies and private entities consistent with the objectives of this Plan.
- The dissemination of public information regarding the Wildlife Area that may include hardcopy and online data as well as other media.
- Regular updating of Wildlife Area regulations.
- Enforcement of duly adopted laws and regulations.

This Plan is a general policy guide to the management of the Wildlife Area. It does not specifically authorize or make any commitment to any substantive physical changes to the Wildlife Area. With the exception of minor operations and maintenance activities, any physical changes that are not currently approved will require subsequent authorizations and approvals. Because any such possible changes will be a part of projects, which have not yet been conceived, designed, or funded, it is not possible to reasonably evaluate the impacts of any such subsequent projects. Any such subsequent projects not included within the scope of this project will require analysis pursuant to CEQA when such projects are conceived and proposed.

9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

The Cedar Roughs Wildlife Area (CRWA or WA) consists of over 400 acres in two discrete units. Both parcels are accessed off Pope Canyon Road in Napa County. The CRWA was purchased to improve public access to the larger federal land area called Cedar Rough Wilderness Study Area (WSA) owned and managed by the Bureau of Land Management. Other public ownerships in the general area include Lake Berryessa, a reservoir managed by the Bureau of Reclamation (BOR). The Cedar Roughs WA and WSA are rough, rugged land covered with chaparral, serpentine soils, and pine/oak woodlands interspersed with small drainages. Hunting and hiking are some of the uses allowed on the WA. The private parcels that are adjacent to the federal and state land are used as rural homes or grazed seasonally by livestock (horses or cattle). The nearby Lake Berryessa reservoir offers many recreational uses, such as boating, fishing, camping and hiking.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.**
None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

If implemented as written, this Plan could result in a "Potentially Significant Impact" involving at least one area of the environmental factors checked below, as indicated in the Environmental Checklist/Initial Study on the following pages.

□	Aesthetics	□	Agriculture Resources	□	Air Quality
□	Biological Resources	□	Cultural Resources	□	Geology /Soils
□	Hazards & Hazardous Materials	□	Hydrology / Water Quality	□	Land Use / Planning
□	Mineral Resources	□	Noise	□	Population / Housing
□	Public Services	□	Recreation	□	Transportation/Traffic
□	Utilities / Service Systems	□	Mandatory Findings of Significance	**X**	NONE

DETERMINATION:

On the basis of this initial evaluation:

X I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

□ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

□ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

□ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

□ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Robert W. Floerke, Regional Manager, Central Coast Region Date

Sonke Mastrup, Deputy Director, Wildlife and Inland Fisheries Division Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

Environmental Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	□	□	□	X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	□	□	□	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	□	□	□	X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	□	□	□	X
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	□	□	□	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	□	□	□	X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Farmland, to non-agricultural use?				
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	□	□	□	X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	□	□	□	X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	□	□	□	X
d) Expose sensitive receptors to substantial pollutant concentrations?	□	□	□	X
e) Create objectionable odors affecting a substantial number of people?	□	□	□	X
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	□	□	□	X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or	□	□	X	□

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	□	□	□	X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	□	□	□	X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	□	□	□	X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	□	□	□	X
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	□	□	X	□
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	□	□	X	□
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	□	□	X	□
d) Disturb any human remains, including those interred outside of formal cemeteries?	□	□	X	□

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	□	□	□	X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	□	□	□	X
ii) Strong seismic ground shaking?	□	□	□	X
iii) Seismic-related ground failure, including liquefaction?	□	□	□	X
iv) Landslides?	□	□	□	X
b) Result in substantial soil erosion or the loss of topsoil?	□	□	□	X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	□	□	□	X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	□	□	□	X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	□	□	□	X
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	□	□	□	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	□	□	□	X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	□	□	□	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	□	□	□	X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	□	□	□	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	□	□	□	X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	□	□	□	X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	□	□	□	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	□	□	□	X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	□	□	□	X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	□	□	□	X
f) Otherwise substantially degrade water quality?	□	□	□	X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	□	□	□	X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	□	□	□	X
j) Inundation by seiche, tsunami, or mudflow?	□	□	□	X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	□	□	□	X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	□	□	□	X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	□	□	□	X
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	□	□	□	X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	□	□	□	X
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	□	□	□	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	□	□	□	X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	□	□	□	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	□	□	□	X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	□	□	□	X
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	□	□	□	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	□	□	□	X
c) Displace substantial numbers of people, necessitating the construction of replacement	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
housing elsewhere?				
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	□	□	□	X
Police protection?	□	□	□	X
Schools?	□	□	□	X
Parks?	□	□	□	X
Other public facilities?	□	□	□	X
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	□	□	□	X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	□	□	X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	□	□	□	X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	□	□	□	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	□	□	□	X
e) Result in inadequate emergency access?	□	□	X	□
f) Result in inadequate parking capacity?	□	□	X	□
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	□	□	□	X
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	□	□	□	X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	□	□	□	X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	□	□	□	X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	□	□	□	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	□	□	□	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	□	□	□	X
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	□	□	□	X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	□	□	□	X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	□	□	□	X

EXPLANATION FOR ANSWERS GIVEN:

I. AESTHETICS

a, b, c, and d. – No impact. Native vegetation dominates the Wildlife Area. No infrastructure developments other than creating interpretive and boundary signs and improving trails, is proposed. A parking lot location has not been determined but it would not change the aesthetics significantly. No nighttime lighting is proposed. (1)

II. AGRICULTURAL RESOURCES

c. – No impact – CRWA does not contain large areas of grazing lands. Most areas are covered by gray pine and oak woodlands, serpentine chaparral, or native cypress stands. (1)

IV. BIOLOGICAL RESOURCES

a. – No Impact. The WA is specifically managed with an ecosystem approach to benefit Special Status Species, other native species and game species. All activities will be in conformance with state and federal endangered species regulations and will be evaluated for potential impacts on Special Status Species. (1)

b. – Less Than Significant Impact. The biological resources of the Maxwell Creek drainage will benefit if the Department obtains funding and staff to work on removing the non-native, invasive trees that now occupy habitat adjacent to the riparian area. Future efforts to remove the large infestation of tamarisk along Pope Creek could have a temporary negative effect on riparian vegetation, but would benefit it in the long term. A project along Pope Creek would have to be coordinated with adjacent landowners to be effective, and would involve additional environmental review process. (1)

c, d, e and f. – No Impact. This Plan does not conflict with any Habitat Conservation Plan or Natural Community Conservation Plan. The acquisition of the Wildlife Area by the Department was supported by the Bureau of Land Management because it currently provides the only public access routes to the Cedar Roughs Wilderness Study Area. (1)

V. CULTURAL RESOURCES

a, b, c, and d. – Less Than Significant Impact. As part of the preparation of this Plan, the Department had a cultural resources survey conducted Sonoma State Anthropological Studies Center at CRWA along Dollarhide Road and at a potential parking lot area. No cultural resources were located. No future substantive physical changes will occur without undertaking additional appropriate cultural evaluations. (2)

XV. TRANSPORTATION / TRAFFIC

e. – Less Than Significant Impact. There are inherent personal risks involving potential injury that are taken when the public uses any recreational area. Because the WA is accessible by foot only, and requires

crossing Pope Creek at both parcels, emergency vehicles cannot access it. Some limited ATV access may be possible down Dollarhide Road during the dry season. (1)
f. – Less Than Significant Impact. Currently public parking is limited to approximately less than ten vehicles along Pope Canyon Road. Public use at this point in time does not reach these limits, nor is the need expected to increase in the near future because of the difficulty of accessing the WA. The Department will work with the BLM and BOR to plan for future use, which will include finding a location for a parking lot, either on state or nearby federal land. (1)

XVII. Mandatory Findings of Significance
a. – No Impact. This Plan is supportive of habitat and wildlife species and cultural resources. It does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b. – No Impact. This Plan does not authorize any substantive physical changes and any unknown, future projects will require subsequent analysis when the specifics of a project are established. There are no impacts that are individually limited, but cumulatively considerable to the point of significance.

c. – No Impact. This Plan provides for compliance with all applicable laws and requirements. It does not authorize any substantive physical changes and any unknown future projects would require subsequent analysis when the specifics of a project are established. It will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

INFORMATION SOURCES:
1. The Cedar Roughs Wildlife Area Management Plan. – DRAFT- June 2005. Department of Fish and Game, Central Coast Region.
2. A cultural resources study within the Cedar Roughs Wildlife Area, Napa County, California. 2004. by D. Haydu. Anthropological Studies Center, Sonoma State University.

Appendix H.
Public Comments and Response to Comments

The Cedar Roughs Wildlife Area Draft Management Plan public review and comment period was July 15 to August 15, 2005. The Initial Study/Negative Declaration was posted at the Napa County Public Library, the Woodland Public Library, the Department of Fish and Game Central Coast Region's office in Yountville, and on the Department's internet web page at www.dfg.ca.gov. It was also circulated to the following public agencies for review: Resources Agency; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Parks and Recreation; Native American Heritage Commission; Office of Historic Preservation; Department of Water Resources; Department of Conservation; Caltrans, District 4; Caltrans, District 3. None of the public agencies responded with comments.

The following individuals and/or interest groups along with the subject area of their comments are listed below.

- Herb Howe – re: trail location, trail maintenance, and volunteer groups
- Carol Kunze, Berryessa Trails and Conservation group – re: biological resources, invasive species, allowable uses, and trail development.

From: Herb Howe <herb_howe@alum.mit.edu>
To: Christina Fabula <CFabula@dfg.ca.gov>
Date: 8/14/2005 7:44:27 AM
Subject: Comments on Cedar Roughs Wildlife Area Draft Management Plan

Comments on the Cedar Roughs Wildlife Area Draft Management Plan

The Cedar Roughs Wildlife Area Draft Management Plan presents a complete and useful description of the flora and fauna of this parcel. These comments concern the plans proposed for the land.

Attached is a map of the Cedar Roughs parcel showing the trails currently in use. This map is also available online at http://herbhowe.members.sonic.net/projects/CedarRoughTrails.jpg
My comments are arranged by the trail names on the map. Please refer to the map for the names of trails and meadows mentioned in the comments.

Cedar Roughs Access Trail

This trail provides access to the BLM Cedar Roughs. As stated in the draft, this trail needs signage and maintenance, both of which are proposed. In addition, a single clear path is needed across Pope Creek. Users are chopping various paths and damaging the vegetation in the stream bed. Most of the trail, which follows an old road, is in good condition, needing only trimming. One section just below Access Meadow, however, is severely eroded and should be rerouted or remediated. An improperly routed side trail has been created around the eroded section and is a candidate for further erosion.

Overlook Trail

Users have created a side trail to a small hill above Access Meadow. This viewpoint offers great views in all directions and makes a good destination for a hike up the Access Trail. To prevent erosion and cutting of vegetation as users continue to enlarge this trail, a properly planned trail should be constructed and signed.

Dollarhide Trail

As mentioned in the report, the lovely Access Meadow shows OHV damage which appears to originate on the Dollarhide Trail coming up from private land and across BLM land. A barricade and signage where Dollarhide Trail crosses onto the parcel is proposed in the draft and should be installed before further damage occurs. Even better would be to work with the BLM and barricade the trail where is crosses from private land onto BLM land.

On page 46 of the draft is the statement: "Because of limited access and steep terrain, there is unlikely to ever be appreciable demand for horse riding at the CRWA. At this point in time the cost of instituting of regulations on horse riding is not justified, because there are no evident or anticipated impacts of horse riding." However, during the wet season, equestrians are accessing this meadow from Dollarhide Trail and causing severe damage to the meadow with many deep holes from horses sinking into the soft surface with every step. The regulations proposed in the draft limiting horses to the dry season and to level ground should be imposed at the barricade on Dollarhide Road.

Boat-In Trail

This trail allows access to Homestead Meadow from Lake Berryessa and, via the Access and Cross Trails, from the road. As shown on the map, the trail crosses a

small corner of private land that is sandwiched between the parcel and BoR land along the lake. This trail follows a historic road that was cut across the face of a high steep hillside where hiking off the trail is impossible. Thus, it would be impractical to reroute the trail around the private property. The draft proposes signage to prevent hikers from going onto private land. This would essentially close this trail.

The Bureau of Reclamation is considering closing the Pope Canyon arm of the lake to motorized boats to allow enhanced non-motorized use. If this happens, the Boat-In Trail would become even more desirable than it is now to allow paddling to the trailhead and then hiking up to Homestead Meadow, an expansive meadow shaded by large old oak trees.

Instead of closing this trail, DF&G should approach the owners of the private property to inquire about obtaining a trail easement for the short section of the trail that crosses private land. Due to the steepness of the terrain, it seems likely that such permission would be granted because the land is too steep for development and because hikers are unlikely to wander off the trail onto the steep adjoining land.

It would be difficult to replace this trail with an alternate route which is completely on public land. The trail may receive increased use if Pope Canyon becomes a non-motorized quiet zone. Finally, the trail should eventually become part of a loop trail which will include the trails shown on the map plus a new trail from Homestead Meadow to the top of the Cedar Roughs ridge and then down the ridge to Access Meadow.

For all of these reasons, I hope every effort is made to retain and improve the Boat-In Trail.

Cross Trail

This scenic trail follows old roads in places and appears to follow a historic, if overgrown, route connecting the Boat-In Trail to Access Meadow. The trail is in a natural location; however, it is poorly placed in several places, leading to erosion. In other sections, it has been chopped through chaparral with associated damage to the vegetation. The trail appears relatively well used and is maintained by users by trimming and tagging.

This trail illustrates a problem. On public lands, if properly designed and maintained trails are not provided where hikers and hunters seek to go, then poorly placed and constructed social trails will be created, leading to erosion and damage to vegetation. Proper alignment, construction and maintenance of this trail should be added to the draft plan.

Volunteers

The draft plan emphasizes the shortage of resources available to DF&G for management of the Cedar Roughs parcel and for trail construction and maintenance within the parcel. Volunteers can go a long way towards filling this shortage. DF&G should create a program to facilitate the use of volunteers for trail construction and maintenance both in the Cedar Roughs and in the Knoxville Wildlife Areas. I would suggest that a section be added to the draft plan outlining a simple procedure which would allow volunteers to do the work needed in the Wildlife Areas for which DF&G lacks the resources.

Past attempts to do volunteer trail work have been discouraged by DF&G in anticipation of these management plans. With the plans soon to be in place, increased volunteer monitoring and trail work in the Wildlife Areas should reduce the damage being done by the ad-hoc creation of social trails while enhancing the hiking experience within the parcels.

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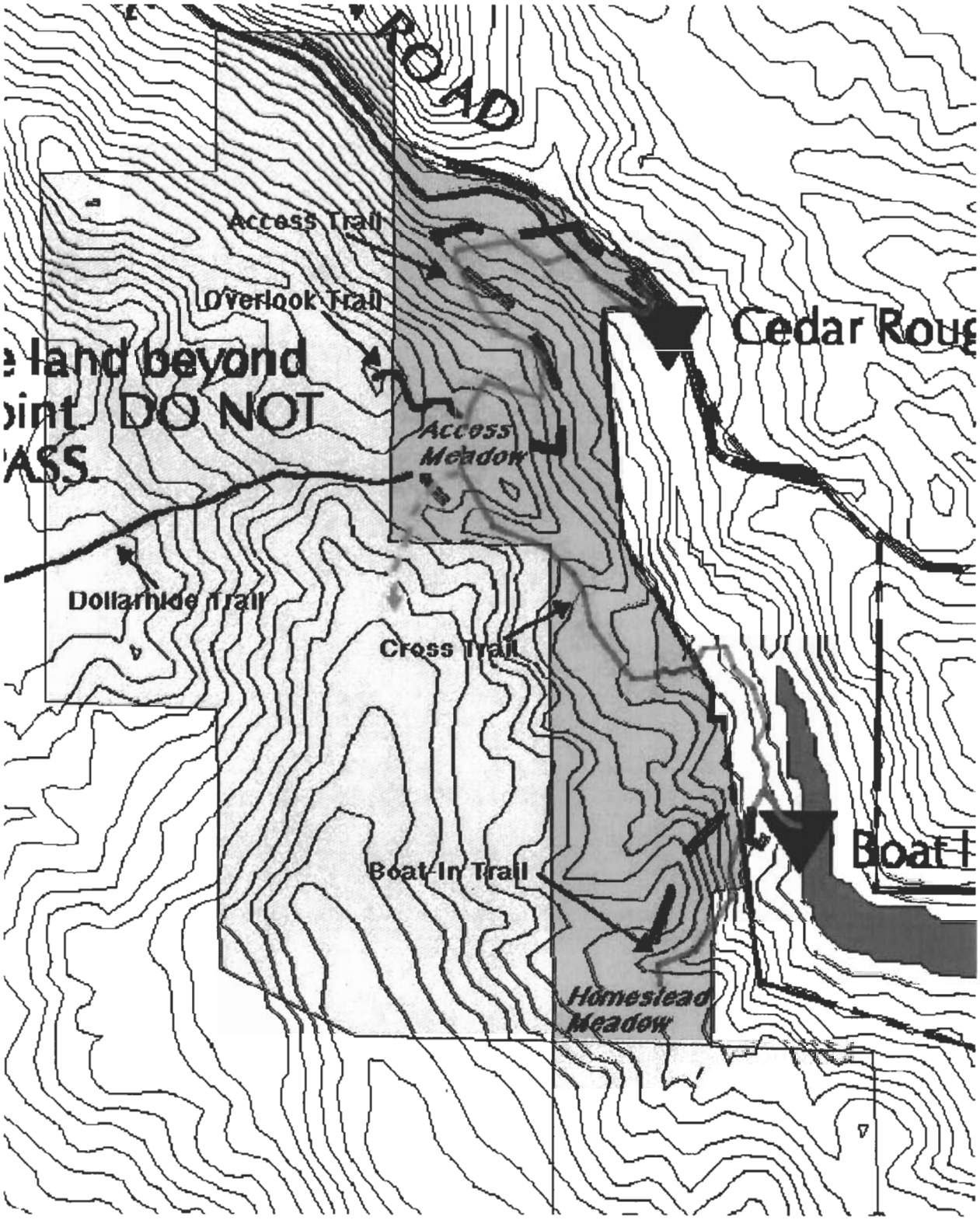
ROAD
Access Trail
Overlook Trail
land beyond
DO NOT
Access Meadow
Dollarhide Trail
Cross Trail
Cedar Roug
Boat I
Boat-In Trail
Homestead Meadow

From: "Carol A. Kunze" <ckunze@ix.netcom.com>
To: Tina Fabula <cfabula@dfg.ca.gov>
Date: 8/12/2005 7:31:30 AM
Subject: Comments on the Draft Plans for the Cedar Roughs WA and the Knoxville WA

Tina,

I am leaving for vacation tomorrow morning so these comments, filed on behalf of Berryessa Trails and Conservation, will be briefer than we would like and informal.

In general, we are impressed with both documents. They are clear, well-written, and will be terrific resources and guides for both trail work and future conservation projects. Well done.

A couple of general comments. While hiking is a specific activity, trails facilitate both public and agency access for other purposes (photography, agency maintenance, etc.) and it would be nice to have this mentioned. It would also be nice to see a statement that DFG is open to working with volunteers. A volunteer-friendly approach might provide access to interested and experienced workers, and ease the path for non-profit organizations such as ours, which want to build trails and carry out conservation projects, such as combatting invasive species, on public land. We look forward to working with DFG in both areas.

CRWA

I saw a river otter in Pope Creek when I was hiking down the Pope Canyon Trail (http://sonic.net/berryessatrails/oldroad.htm).

Arundo has been found on Pope Creek, downstream from the CRWA. From Herb's Berryessa Projects page (http://www.herbhowe.members.sonic.net/projects/):
Invasive Species Removal

* Arundo to be eradicated:
  o Pope Canyon and Berryessa Pines - see (map <http://www.herbhowe.members.sonic.net/projects/Arundo.jpg> and a photo

<http://www.herbhowe.members.sonic.net/projects/pope_arundo.jpg> of clump A3 in Pope Canyon).

****
We would like to see primitive camping considered as an allowable activity as the report indicates, particularly for consistency with BLM CR parcel. We assume and support this not being in a fixed location, unless use develops to the point that a fixed location would be less of an impact.

We are generally OK with the decisions on horse-back riding and bicycles (no designated trails), but have not had time to confer with other members of the Trails and Recreation committee on this. We have some concerns about the decision to not prohibiting bicycles due to consistency issues with the BLM CR parcel which is up for wilderness

designation. We definitely concur with the prohibition on OHV use.

We very much support reviewing existing old roads and trails for integration into the BRBNA regional trail system, but want to be sure that DFG will consider the development of some new segments if they should be needed. It seems clear that consideration will be given to a new trail linking to the BLM Cedar Roughs parcel, but we don't want to foreclose other new segments. In general, however, we agree that we base the trails primarily on what already exists.

KWA

We generally agree with the decisions on camping and horse-back riding, and the prohibition on OHV.

We have some concern regarding designating bicycle trails as the report indicates that the area does qualify for state wilderness status and we are aware that the BLM parcel on Blue Ridge contiguous to the KWA has at various times been included in draft wilderness bills, although it is not up for current wilderness status. While not recommending state wilderness status due to the impact on costs for planned management activity, particularly activity related to combatting invasive species, the draft plan does indicate that attempts will be made to preserve the option for future designation. Bike trails will make any future designation of the KWA as state wilderness substantially less likely. In addition, the presence of bicycles do lessen the wilderness-type experience for other users. In a densely-forested area visual and physical contacts with bicycles are likely to be brief. In the KWA, however, with its long grassy valleys, many areas of sparse or virtually no trees, and overlooked by hikers on the Blue Ridge, bicycles are more likely to have a significant impact on the quality of the experience for other users.

We concur that any designated trails should be based primarily on the existing ranch roads. However, we would not want to completely forclose the possibility of developing a new segment of trail should there be an interest in accessing a particular viewpoint, creating a necessary link, or for other reason that makes consideration of a new segment advisable. In addition, we would like the unmapped ranch roads to be considered as part of the "existing ranch roads" not with a view to making all of them formal trails, but rather to allow consideration of these routes for inclusion in the regional trail system if it should be found that such inclusion were necessary for access to a particular area or needed to create a link or loop trail.

Finally, we strongly request that the possibility of a trail linking to the Blue Ridge not be foreclosed. A trail along the Blue Ridge is planned, and there is need for access from the KWA to that trail. Indeed, according to our own experience and discussion with other hikers, a fair number of hikers already climb to the Blue Ridge from the KWA. It is an almost irresistible trek for anyone who regularly hikes in the area and is an established destination. In fact, there is already one such route mapped and posted on the Internet. It seems likely that this type of activity (hiking to Blue Ridge) will increase rather than decrease.

The invasive species issue is not persuasive. The KWA is not a pristine area in terms of native plants. No particular reason is given as to why a single trail route to the ridge would present any risk over any other type of access or use that is allowed. In addition, a well constructed trail should not present an erosion risk, whereas an unplanned social trail that would inevitably develop if no sustainable trail is built.

We therefore suggest that it would be better to create such trail access to Blue Ridge, in order to minimize the impact on other likely areas of access and guide hikers away from sensitive areas such as prairie falcom aeries.

In particular, we recommend working with BLM to develop a trail link from the top of Long Canyon, already a designated hiking route, to the dirt road across the county line which leads to a trail up to the Blue Ridge. A map of the Long Canyon route is attached and can also be viewed at http://www.reflexpoint.org/~afulks/knoxville/longcanyon.jpg. In addition, a map of the Blue Ridge Trail and access road is attached with a potential access trail marked in blue (map can be viewed without blue linking trail at http://www.reflexpoint.org/~afulks/blue_s/blueridge_s.htm). This would allow access to the Blue Ridge trail without having to develop a new trail to the ridge in the northernmost part of the KWA.

It is in the more southern area of the KWA that a new access trail to the Blue Ridge should be considered.

Carol A. Kunze
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Itemized Public Comments and DFG Responses:

1) Interest expressed in seeing DFG coordinate and work with volunteers on trail installation, trail alignment, trail maintenance, and various conservation projects.
   Response: Volunteer assistance can be helpful on DFG-approved conservation projects. If DFG staff are assigned to work at KWA on such projects, volunteer recruitment and utilization will be considered.

2) River otter seen in Pope Creek.
   Response: comment noted.

3) Request to consider primitive camping within CRWA, in part for consistency with the regulations which allow camping within the BLM's adjacent Cedar Roughs Wilderness Study Area.
   Response: The Central Coast Region office will consider adding primitive camping within the CRWA at the next regulation cycle (2006).

4) Request to consider new trail segments at CRWA in addition to the existing unofficial roads/trails and to explore the possibility of integrating any trails into the Blue Ridge Berryessa Natural Area trail system.
   Response: Priority will be given to maintaining existing access routes before new trails are constructed. Again, DFG must have staff time assigned to CRWA before trail projects are undertaken.

5) Comments on poor existing unofficial road/trail conditions; including vegetation chopped by users, erosion, and equestrians entering from private property to the west creating damage to a meadow during the wet season.
   Response: comments noted.

6) Request to consider limiting horses to the dry season due to the damage they are doing to a meadow.
   Response: comment noted.